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THE

# FLORICULTURAL CABINET

AND

# FLORISTS' MAGAZINE.

JANUARY TO DECEMBER, 1844.

VOLUME XII.

CONDUCTED BY JOSEPH HARRISON,

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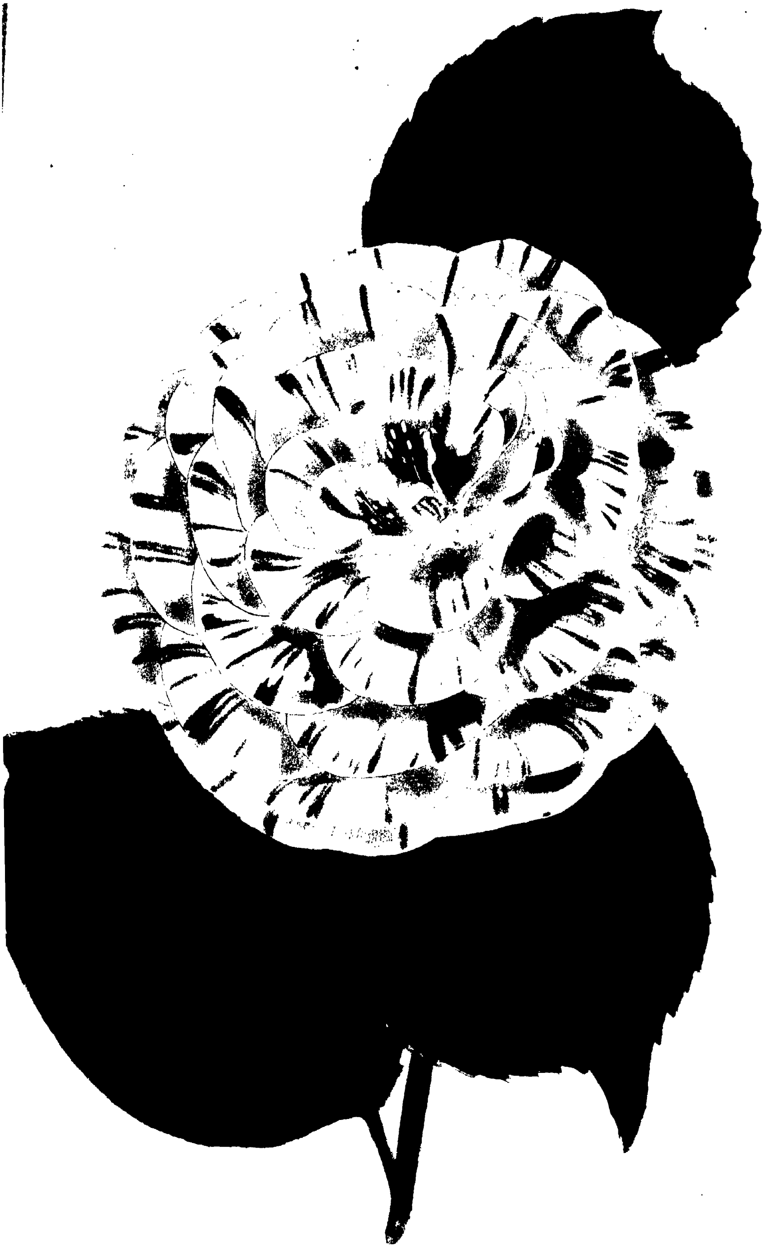
# PREFACE.

We prefer, in general, in each number of our Magazine to furnish our readers with the *means* of estimating its merit, and such has uniformly been our practical aim. We do not wish, however, to neglect the opportunity, which custom yearly supplies, of reverting to its progress, (and this in several respects is a pleasing task,) and to renew our assurances that its future improvement will always be determined by our own or our readers' discovery of its necessity and means of accomplishment.

By glancing over the pages of the present volume an opinion of its merit will be obtained that we cannot allow ourselves here to express.

Twelve years have now passed since the FLORICULTURAL CABINET first appeared; and although we took the lead by being foremost in commencing, and other publications have followed into the field, by the assistance which has been so liberally supplied, we have been enabled to sustain our Magazine in the elevated position in character and circulation (far beyond that of any other similar work) which public estimation had raised it to. And the Conductor cannot therefore desire a more flattering testimonial that his endeavours are approved; and he most sincerely tenders his thanks to SUBSCRIBERS and CORRESPONDENTS, by whose aid he has been so liberally supported and encouraged. But while we thank our friends for their assistance, we very respectfully beg for its continuance, that we may endeavour to perform our duty so as each month it may be increasingly approved. And as it is by our Friends' kind assistance and ready patronage that we have been enabled to accomplish whatever improvements we have already made in our Magazine, and hope to compass others as they may offer, they are now *individually* and *aggregately* solicited to continue their kind offices. As heretofore, we will not admit into our pages that which will not be of real use, and innocently interesting, so as to promote floriculture. We never have, newspaper lik imposed upon our readers a mass of useless matter on other subject nor will we do so; the utmost equivalent shall be given to our subscribers in *floral* information. That we cannot extend our pages i each Number, even for the same charge, is a source of regret; bu the Engravings, &c., cost us more than the other portion of the Work and preclude its possibility; but we intend in future to adopt al available means for maintaining the interest of the Publication. As by the common course of nature, some of our friends pass away, w solicit those remaining to favour us by a *recommendation* of ou Magazine to others, and we will use every endeavour to give *proo* of our gratitude for such kindness.

*Downham*,
*December* 23*rd*, 1844.



*Camellia jap. Alexina (Louis)*

# THE FLORICULTURAL CABINET,

## JANUARY 1st, 1844.

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# PART I.

## EMBELLISHMENTS.

### ARTICLE I.

### CAMELLIA JAPONICA ALEXINA.

TERNSTRŒMIACEÆ. MONADELPHIA POLYANDRIA.

This very beautiful Camellia is in the very select collection of Messrs Low and Co., of the Clapton Nursery, and is now offered for sale (as by Advertisement in the present Number). It is understood to be the only CARNATION STRIPED CAMELLIA that has been introduced into this country having *imbricated* flowers.

The pretty flowering variety, Duchess of Orleans, is the nearest to it in its flower, but the blossoms of Alexina is much larger, and the stripes are of a much more intense colour, being strikingly distinct. The foliage of the Duchess is of a sickly appearance, whilst the present variety is of robust health. Taking C. Alexina, as a whole, it is *by far the finest light Camellia* ever before sent out, and deserves a place in every collection.

The Camellia was first known in Europe from the accounts given by early travellers to China and Japan, who relate that they had seen in these countries rose-trees of the size of large oaks, having dark green shining leaves. Such accounts were considered fabulous till the Asiatic traveller, the Jesuit George Joseph Kamel, who visited Japan as a missionary in 1739, contrived to procure two plants of the single red, which he brought to Europe, and sold to Lord Petre for a considerable sum. His Lordship had them sent to the gardens at Thornden Hall, in Essex, where, being kept in a hothouse temperature, they were killed. The gardener at Thornden, at that time, was a Mr. James Gordon, who, in 1742, commenced a nursery at Mile End, near London. He, being somewhat aware of the value of so ornamental a plant as the Camellia, managed it so as soon to procure another plant, which he put out in the open border of a conservatory, where it continued to grow for ninety-four years, till the nursery was broken up to build upon in 1837; from it, it is supposed, many thousands of young plants had been raised as stools to bud, inarch, &c., the subsequent double kinds. It is generally understood that the Camellia was introduced into this country in 1792, but the above fact confirms the introduction from 1739 to 1742. Mr. Gordon died in 1780, and he had not only obtained the single red, but the double white and red striped. The single red, too, was figured in the Botanical Magazine in 1787, where it is observed that the plant will very probably be found as hardy as the Laurustinus or Magnolia. The plant was then sold at a very high price, and in consequence prevented its being hazarded as trial.

The species and varieties introduced from China to this country, in addition to the one now figured, are C. euryoides, white, C. Japonica, red, C. Kissi, white, C. oleifera, white, C. reticulata, red, and C. Sasanqua, single white, double white, semi-red, and double red. The varieties raised in British and continental gardens now exceed one thousand; all are pretty, but many of them peculiarly handsome.

The soil best adapted for the Camellia, is one part turfy heath, two parts of rich turfy loam, to which add another equal part consisting of a portion of sharp sand, bone dust, and charcoal in small bits about the size of a field bean, and a similar quantity of well rotted hot-bed dung. These being incorporated well together, chopped not sifted, for four months before using, make a compost for the plants we have never seen equalled. In potting use a free drainage of turf cut into pieces the size of an Orleans plum, over which place an inch of moss, and when putting in the compost in potting, drop in a few pieces of gritty stone, in order to absorb any overplus of water. When potting take care to have the soil moderately dry, and in filling it in round the ball to do it in regular layers, pressing it rather firm so that no space be left. Many cultivators advise repotting just before the plants begin to grow. We think this plan better adapted for nurserymen, and those whose only object is to make wood. The production of blossoms is another thing; and in the case of luxuriant plants, this can only be done by a temporary check of some kind, the best of which is, in my opinion, limiting the supply of water at the root, and not calling a new series of fibres into play until the blossom-buds are decidedly formed. Repot Camellias when they require it, which is soon after they have made their young growth—as soon as the young leaves are perfectly developed, and the end of the young wood at the point of junction with the wood of the former year begins to turn a little brown and the flower-buds can be just seen. The ball of the plant should be rather moist at shifting; and when it is in a pot-bound state, it should be immersed in tepid water for an hour, about three days previous, allowing a day or two for the superfluous water to drain away before potting; place the ball immediately on the moss. After shifting, the plants must be placed in the green-house, &c.

The thermometer is kept during the season of growth from 60° to 65° by day, and 50° to 55° by night. The treatment is now of a close and moist character, giving air in moderation and with caution every morning, from ten o'clock until noon, and then, unless very hot weather, shutting close up. A little fire-heat is given every morning, from seven o'clock until eleven, when it is taken away until four o'clock, and then applied for the evening; the temperature being from 65° to 70° by day, and from 55° to 60° by night, and accompanied with a free circulation of air, avoiding all cold winds. The main business now is the concentration of those principles which form the future blossom-bud, now in an incipient state; strong action of the root with free watering, and an overmoist atmosphere, will readily convert the would-be blossom-bud into a second shoot. The plants are now very sparingly watered; in fact, a good smart syringing every afternoon immediately the air was taken away, say four o'clock, is nearly sufficient. A little fire should be made every afternoon, except on warm sunny days, about two o'clock; but put it entirely out about five o'clock, as it is only requisite to warm the pipes or flues sufficiently to produce a genial vapour for the night; and half an hour after the fire is pulled out, the flues and floor are saturated with water, to be evaporated by the next day's ventilation.

When the bud is formed it requires feeding; and the fire must be dispensed with entirely, merely observing in the case of sunny afternoons to make free use of sun-heat, by shutting up the house early in the afternoon, say from three to four o'clock, according to the weather. Air must be given freely at all opportunities, and the plants syringed heavily at seven o'clock in the morning, and again at four o'clock in the afternoon, saturating the floors and flues, or pipes, with water in the evening. The plants must be well watered at the root whenever they require it, using liquid manure from old dung, in the proportion of one part liquid manure to four of clean water. The plants now possess abundance of new fibres, and their powerful action, assisted by liquid manure occasionally, produces both a plump bud and a dark leaf, and enables the plant to store up abundance of necessary food for the expanding blossoms.

At the respective periods of growth and flowering, the plants will require plentiful watering; during the latter, if not regularly supplied, the bloom-buds will infallibly fall off, instead of expanding into flower; at other times, a regular moderate supply is essential. The effect of constant watering may be presumed to diminish or destroy the fertility of the small quantity of earth allotted to each plant; therefore, when the annual repotting occurs, carefully take away as much of the former ball of earth as can be done without injuring or cutting the roots.

The plant may be considered strictly a hardy greenhouse one, similar to the Myrtle, only requiring protection in severe weather; and if it is kept just above freezing point, a temperate heat, it will succeed much better than if grown in a high temperature. At the period of making their growth, an additional degree of heat will be found advantageous.

Camellias are readily increased by budding, inarching, or grafting. Cuttings of the single red strike the readiest, taking them off in July or August, that is, when the young shoots are sufficiently ripened at the base. Each must be smoothly cut through at a joint, that is, where it has last pushed from, be divested of one or two leaves, and then firmly planted around the pot, having the lower half of compost, and the upper half of white sand. Being well watered, and the pots plunged in a frame of moist peat, and closely shaded for several weeks, they will form callosities or fibrous roots, and, as soon as they can with safety be removed, they must be potted singly, in small pots, in the compost already described. After potting, they require to be placed in a close frame with peat, sprinkled over head occasionally with tepid water until they begin to root afresh, when, by degrees, air is to be admitted, so as gradually to inure them to a cooler atmosphere. The following season they must be repotted, in the usual compost, and in all respects treated as the blooming plants are, and by the succeeding season they will be strong enough for inarching, &c.—the best time to do which is early in spring, just before the plants begin to grow, and for budding, as soon as the young wood is sufficiently ripened to be firm.

## ARTICLE II.

## OBSERVATIONS ON THE CULTURE OF THE RANUNCULUS.

### BY MR. GEORGE LIGHTBODY, OF FALKIRK, SCOTLAND.

Agreeable to your request, I now send you a few observations on the culture of the most beautiful and regular of all the florists' flowers,—the Ranunculus. I lay no claim to being a standard authority, but merely intend to state my own practice, the result of many years experience; and the success by which it has been attended, is known to too many for me to attempt anything like exaggeration.

Another object I have in view, is, that your periodical offers a greater certainty of its preservation for reference than the columns of a newspaper. Beside, many persons apply to me for instructions: I shall in future refer them to the Number of the Cabinet in which this may appear; for writing such long details, and so frequently, has become rather irksome. Should I make any discovery at a future time that may be advantageous, I will with much pleasure communicate the same.

The situation best adapted for Ranunculus beds, is an open level site, free from eddy winds and fully exposed to the sun.

### Preparation of the Beds.

It is of great importance to have the beds prepared in a proper manner. I strongly recommend this work to be done in August, not later than the beginning of September.

My reasons for this early preparation are twofold. Fine weather may almost be depended on at this period, for the purpose of having the soil thoroughly sweetened, by turning what is intended for the surface of the beds, frequently to the action of the sun. It also allows ample time for the consolidation of the beds, so as to make them retentive of moisture, to insure a strong bloom.

There must be at the least two feet of good soil in depth; if there is not, the substrata will require to be removed and replaced with rich soil of a retentive nature.

My practice is to remove the surface of my beds annually to the depth of nine inches. The subsoil is then turned up a whole space in depth, and well broken. I usually allow my beds to remain in this state for a day or two to sweeten the subsoil as much as possible, by exposure to sun and air. I then throw into the beds about four inches of old cow-dung not less than one year old, breaking it well. I then sprinkle over it some new slackened lime finely sifted; shake up the dung so that the lime may penetrate through every part of it to destroy all the worms; after this rake the dung level, and fill up with the soil intended for the surface: as the beds subside, fill up with soil reserved for the purpose.

The benefit resulting from the use of lime is, it corrects the acidity in the dung, and the cultivator will not be troubled with many earth worms in his beds, casting out his roots and making their ugly casts on the surface, also making the soil pervious to the drying winds of spring.

For my subsoil I use a rich clayey friable loam, very retentive; but I prefer a rich light soil for the surface.

During the preparation of the beds, destroy everything that appears in the shape of vermin in the soil;—soil for the Ranunculus cannot be too free from these pests. If there is wire worm spare no labour to eradicate them, catch them and break them, give them no quarter, for they are the most destructive enemy that the florist has to encounter.

The best edging for the beds is a neat wood, one rising about two inches above the level of the paths; it harbours no vermin, and its utility will be perceptible when we come to the planting time.

Rake the surface of the beds occasionally; and during frost, break the surface with a spade and pile up the frozen clods to allow the frost to penetrate as far as it will, but don't disturb the dung. Rake the soil level when a thaw takes place; this helps to keep the soil sweet, and destroy any vermin that may be in it.

## Planting Time.

The time for planting will vary in the different portions of the island. In the southern part, spring is earlier by a fortnight than where I reside. A few degrees of latitude makes a sensible difference in climate, therefore cultivators must be guided by the climate of their respective locality.

After the middle of February, when the surface soil will rake easily, and the weather is dry, I commence to plant. The beds must be full up to the wood edge, and quite level. This is best done by a piece of board extending across the bed; and two persons causing it to rest on the wood edge, and drawing it from end to end, will speedily remove any surplus soil and leave the bed perfectly level. Then mark on the wood edge the rows, say four inches and a half apart for the old varieties and five and a half for the new. If the beds are four feet wide, twelve or fourteen roots of the old sorts may be planted in each row, but ten of the new will be found sufficient, in consequence of their more vigorous habit. The best way to plant is to mark across the surface for each row. Then excavate with a trowel to the depth of one and a half inch. To insure the exact depth, I use a piece of wood with a notch cut at each end, the requisite depth, which is pressed into the drill till the projecting parts rest on the wood edge, (the back of it serves for levelling the beds.) In planting the roots keep the crowns up, press the claws into the earth firmly to prevent worms casting them out, but take care not to break them. Two persons, after a little practice, will plant a large quantity in a little time by this process.

## Management from Planting Time till Blooming Time.

The roots, after having been in the ground for a few days, swell to three times the size they were when planted. Should very wet weather occur and afterwards sudden and severe frost, which is often experienced at this early season, there is danger of some of the roots being destroyed. In this case, it is advisable that some old mats or dry litter of any kind should be laid over the surface of the beds to prevent the frost penetrating to the roots. The beds can be cleared when a favourable change takes place. By the middle of April the plants will all be up. They frequently rise so strong as to displace the soil about them. Look over them and take the displaced soil, break it, and put it about the neck of the plants. When the foliage of the plants has attained to the height of two or three inches, then is the proper time to stir the surface of the beds, do this carefully to the depth of two inches between the rows, but don't go so deep close to the plants. Break the soil fine and keep it level. Take care that the plants are not disturbed nor their foliage injured. See that the soil is gently pressed around the neck of the plants to keep out the drought. Persons who grow Auriculas will find it good practice to reserve a portion of their old compost, and after the beds have been stirred, strew it equally over the surface to the thickness of about a quarter of an inch. This serves for a top dressing, and gives the beds a neat and finished appearance, and helps to keep out the drying winds of spring.

During April and May, should the weather prove hot and dry, it will be of advantage to the plants to water occasionally; this must be gone about with judgment, for in the event of frost taking place through the night, the foliage would suffer and the plants receive a check. When there is no appearance of frost, water liberally with rain or pond water administered between the rows with the pipe of a watering pan held low, so as not to make holes in the soil. Spring water should never be used till it has been long exposed to sun and air to soften it and raise its temperature.

Look over the plants occasionally previous to the bloom, for at this time they are liable to receive damage from cuckoo spit harbouring in the foliage, and a small destructive caterpillar that lodges in the embryo blooms eating out the whole of the petals and leaving nothing but the empty calyx.

[*To be continued.*]

## ARTICLE III.

### REMARKS ON THE ARNOTT STOVE FOR HEATING A GREEN-HOUSE.

BY S. V. V. N.

In your Number for the last month, a correspondent, " A. B. C." inquires if the Arnott stove answers for greenhouses; and Mr. William Holmes, under Article III., kindly offers the best information his present experience affords. With a view of rendering my humble assistance on this interesting subject, brought under notice through the valuable improvements for the regulation of fire-heat, so generously and disinterestedly contributed for the public benefit by the able and scientific inventor of the stove, Dr. Arnott, I beg to submit my experience thereon for the information of your inquiring correspondent and general readers.

It is to be borne in mind, that although Dr. Arnott suggests various plans for stoves, yet it is not simply the form thereof, but the discovery of the grand principle of regulating heat by admitting only sufficient air to feed the required combustion, for which the public are so much indebted to him. Various forms of stoves are protected by patent, but are all based upon this leading feature, which no patent can now shackle, and may be adopted by any one. I mention this to show that we are not compelled to purchase a patent stove if we wish to have the advantage of the principle applied to a greenhouse, where those of iron only, are objectionable, not only from their speedy destruction by corrosion in a damp atmosphere, but also for the simple reason, that however beautiful and perfect their construction may be, yet improper fuel and inexperienced management may cause the fire to be extinguished in the middle of a severely frosty night, (as was the case with "A. B. C.,") when, by the ready departure of heat from a thin case of metal, the consequence may be, the destruction of many valuable plants.

The plan I adopted last winter was, to build the stove itself of brick within the house, midway against the back wall, and the effect is, that should the fuel be all consumed before attention can be given in the morning, (which from the slow combustion, is very rarely the case), the heat retained in the brickwork is sufficient to keep out frost for several hours. I found, on one occasion, on making up the fire the last thing at night, (noting the time,) and without doing anything more whatever to the stove, that it retained heat through the brickwork for fifteen hours!

It is constructed thus:—the bottom part of brick, and all the top or upper part of fire-lumps, which are of the temper of fire-brick, and used, I believe, generally for the bottoms of ovens; the advantage of the latter is, that they are easily secured with small iron cramps, a necessary plan, otherwise the expansion from the heat will loosen the work and produce crevices, which would be injurious to the perfect action of the stove. Lime mortar or Roman cement is useless, as it readily calcines and will soon leave the joints open. The mortar I used was simply sand mixed with warm water; not common sand, but such as is used by iron-founders in this neighbourhood for casting, and called by them fire-sand; the effect produced from this is, that instead of calcining it is baked (or vitrified in some measure) by heat, and becomes ultimately as hard as the brick. I should suppose that the same material of which bricks are usually made will answer every purpose. The interior, where the fire (or fuel) is placed, is of the usual size of the Arnott stoves, and formed of the fire brick, that may be had of most persons who sell such stoves, seven and a half inches square horizontally and twelve inches deep; at the bottom of this there is a small ledge on which rests a portable cast-iron grating, to support the fuel; portable, in order that it may be readily replaced if injured by the heat or choked with clinkers, as is frequently the case on using some sorts of coal; underneath this, of course, is the ash-pit. The doors, for placing the fuel in, used for the ash-pit, situate as in the patent stoves, are of cast-iron, made air-tight, with substantial frames having projecting arms that they may be firmly walled into the brickwork. Above the space I have described for the fuel, (I believe in the Arnott stove called the fire-pan,) the interior is wider, say fourteen inches square, and continued up about ten and a half inches, when an iron sand-groove is securely fitted and a wrought iron cover rests thereon, air-tight, in the usual way, having a knob for a handle to lift it by; and close under this sand-groove is the aperture for the flue, which is of copper pipe four and a half inches diameter, carried up to within about one and a half feet of the glass and then passing through the wall. Although I have used copper, I am of opinion that a brick-flue either extending horizontally and then erect, or carried perpendicularly from the side of the stove, would be preferable; if sufficient height be given to the chimney to insure draught, (an important point with slow combustion). Over this air-tight cover, there is still a space about four inches higher, and then a cast-iron cover at top, fitting flatly on the brickwork, which need not be air-tight. This has the effect of modulating the heat that with one cover would be too intense for a greenhouse.

So far I have adopted a plan suggested and acted upon successfully by two enterprising floriculturalists residing in a neighbouring town, but with them, the air for feeding combustion being admitted through a valve in the ash-pit door, an objection arose, that the continued extraction of atmospheric air, for several hours, from a closed house, would probably injure the health of the plants; to obviate which, I admit the air from the potting-room, through the wall to which the stove is attached, by a copper pipe two inches in diameter conveyed horizontally to the ash-pit; and at the exterior end thereof is a regulating valve, with balance weight to adjust at pleasure, made on the principle of the plug valve recommended by Dr. Arnott, and similar to that applied to one of the fancy stoves. I find this valve answer my purpose well, as I regulate it the last thing at night according to the appearance of the weather and the state of the thermometer; but the very best valve for an Arnott stove is the self-adjusting one, brought into action by the expansion and contraction of a bar of metal placed within the stove, as it is unerring and not so liable to injury and destruction as the thermometer one and others. On the top of the stove should be placed a broad tin pan containing water, the evaporation of which is necessary for the health of the plants under the operation of the stove, as the air would otherwise be rarified too much.* The fuel I use is Welch stone coal, (I believe a description of anthracite,) such as is burnt in malt-kiln fires, and this I find from long experience to be the best for closed stoves. It should be broken in pieces from the size of an egg to that of the fist, or even larger, but by no means use small coal or coke for a night-fire, as the former chokes the draught immediately, and the latter in a short time, by being sooner reduced to ashes than almost any hard fuel; and the effect would be, that the air for feeding combustion (all of which must come from the ash-pit through the grating) would be excluded, and, of course, the fire go out. The stone coal makes very little ash or cinder, and produces very little gas to cause smoke that may choke the flue. One of the most particular things to attend to in the management of the Arnott stove, is, raking the ashes from the grating the last thing at night; I manage it with a single tooth iron rake, which will pass freely through the bar of the grating, the bars of course ranging in a direction to and from the door.

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* The propriety of keeping "a large open tank of water" in a greenhouse, as described by "A. B. C.," appears very questionable, particularly when heat is not applied, as it may cause damp and mildew.

I have used this stove best part of last winter, and at this season have had occasion to light it but four times; therefore improvements may, possibly, yet suggest themselves; but in the neighbouring town of Weymouth, it has been tried two winters and found successful. I feel sanguine that this improved application of fire-heat will be found considerably more economical, and of much easier management, than the old plan, particularly when this adoption of the new principle attracts the attention of scientific persons; and that the result will be a considerable augmentation of the number of greenhouses, and an increased encouragement of floriculture.

If the principle of the Arnott stove were applied to the present fire-places for warming greenhouses, I think it would prove to be more economical than the old plan; but if not so, there would certainly be a great advantage in very severe weather, from the length of time the fire will continue without being looked to, in consequence *of the regulation of combustion,* particularly with a self-acting valve.

## ARTICLE IV.

## REMARKS UPON GROWING SEEDLING CALCEOLARIAS.

BY AN AMATEUR OF EDINBURGH.

In offering the following remarks upon the culture of seedling Calceolarias to prove them, I shall not premise the few hints with any eulogy upon the beauty of the plant, as it is so well known and so universally admired, not only for its long-continued season of flowering, but also for the now endless variety of colours that it presents through all the shades of white, yellow, and crimson, to the strange admixture of hues in the beautifully unique Chandlerii.

For some years past I have raised plants from hybridized seed gathered off the best varieties among a good collection of them in my greenhouse. As the plants ripen their seeds most freely under the protection of glass, I get an abundance of fine, well-ripened pods, containing quantities of good brown seed; these seeds I sow in pans about the end of July or beginning of August, and then place the pans in a gentle heat, always giving plenty of air whenever the weather permits. In a short time the seeds begin to germinate, and innumerable small plants make their appearance. At this stage of their youth great caution is requisite not to water-run them; and, therefore, they should be watered with a very fine rose, or, what is, perhaps, better, with a wet brush, that by passing your fingers quickly over the bristles causes the water to fly off in the form of small rain; this I have found a very good and safe mode of watering when the plants are very young.

In the course of two or three months the plants will be found in fine condition for removing to pots. At this stage of their treatment I found myself rather embarrassed in disposing of the great quantities of plants which I had raised, as by the time each plant had been potted off into a pot large enough to flower it, my seedlings would have occupied no end of room, and my accommodation for plants not being very extensive, I thus felt bound to restrict myself to a few dozens of seedlings.

The rest of my young seedlings I was unwilling to cast away, being anxious to prove as many as I could, if not all, under the protection of glass. I last year thought of a plan which proved quite satisfactory.

Having a great quantity of small pots (sixties) at hand, I procured good old pasture soil, adding a little white sand, and potted off the greater part of my seedlings, all those that had two or three pairs of leaves, and then replaced the pan in its old position as a second crop of them appear, and I have found a second crop produced most good ones.

I then procured several boxes, about a foot deep, which I filled with good old pasture soil, not sifted, but well broken down; in these boxes I sunk the little pots up to the rim, and on a level with the edges of the boxes, and there the plants remained till they flowered.

As the plants grew, they forced their roots down through the pots into the soil below, from which they derived the requisite nourishment, and they continued to flower during the summer in the utmost luxuriance, presenting one unbroken mass of flowers of every variety of hue. If any good ones presented themselves, I generally removed them as soon as I perceived them, by raising the small pot out of the box, and then repotted the plant into a large pot; and though the roots had been disturbed that had penetrated through the small pot, yet if the ball of roots be not broken in turning out the plant, it will not flag at all if well watered immediately after.

By this method the plants grew much more regular than if merely pricked out into boxes, where they generally overrun each other. Thus thousands of seedlings may be proved in a comparatively small space.

I have this season several boxes full of fine healthy plants that I would not have had room for had they been grown in large pots. As I raise my seed in a hot pit, I also place there my boxes until the plants are well established, when I remove them to the greenhouse to be kept moist, but not wet, to prevent the plants damping off, which they are very liable to do if not well aired in mild weather.

These remarks, the result of experience, I send to you, should you think them worthy of notice in the pages of your most useful CABINET.

December 12, 1843.

[We shall be glad to receive further communications.—CONDUCTOR.]

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## ARTICLE V.

## ON THE DEEP INTERMENT OF CHOICE HYACINTHS AS THE BEST MEANS OF INSURING A VIGOROUS BLOOM.

BY W. C., M.D.

THE above excellent method of treating fine Dutch Hyacinths was suggested to me when in Paris many years ago. I can bear ample testimony to the striking effect produced by a method which at that time was novel and little known. I am aware that the practice of plunging bulbs at the usual planting season is now becoming pretty general; but my object in the present article is to insist upon the relative advantage of deep plunging as compared with the usual method. It may be needless to remark that the object originally in view, and more or less attained by such process, was to secure the early rooting of the bulb; thus placing it under the most favourable circumstances for forming strong and powerful bloom.

It has been argued, however, that the plunging to the depth now recommended is altogether unnecessary, the depth of one foot being equally conducive to the effect proposed, and securing equally the same advantages; but a very little consideration will enable us to establish the principle contended for.

The further and the more perfectly a bulb, whose dormant period shall have approached completion, be removed from the immediate influence of air, light, and moisture (three at least of the great stimulants of vegetation), the more entirely will such bulb be thrown upon its own resources, and the force of its innate vitality be directed to the vigorous and luxuriant development of radicle—a condition amply explanatory of the advantages insisted upon, and which become so remarkably conspicuous in the subsequent period of bloom and beauty.

Again, it will be found that the further the pot has been removed from the surface, the bulb will not only have rooted more extensively, but the greater will also be the diameter, and the less the advance, of the rising bouton.

Fully convinced, therefore, of the truth and soundness of these principles, and having been always satisfied with the result, when they have been properly carried out, I can confidently recommend the following procedure to the adoption of amateurs for the successful flowering of the Hyacinth.

About the last week in October proper sized pots are to be selected and effectually drained; these are then to be filled with light, sandy, maiden loam, the argillaceous kinds being studiously avoided. Strong pressure should then be made in the centre by a convex ball of wood, somewhat larger than the bulbs; and into this depression should be placed a corresponding portion of an equal mixture of dry rotten dung, sifted, and fine white sand; herein are the bulbs to be firmly implanted. The strict observance of this double pressure is, from well-known reasons, a valuable element in the success of the operation. The bulbs should not be wholly immersed; a third part may be well left uncovered with compost. The pots being thus prepared, a pit, from four to six feet in depth, is to be dug in any convenient and dry ground; and the pots, having been duly arranged therein, are first to be covered with a thin layer of straw, and over this may be placed a lattice-work of pea-sticks, as precautionary indications upon their removal. The pit is then filled in. On the 20th or 25th of January the pots are to be carefully disinterred, when, should the bulbs have been originally good and strong, they will be found to have completely filled their pots with roots, and presenting a finely-developed bouton, indicative of the favourable auspices under which they will now throw up their scape.

There can be little doubt that several other bulbous genera might be very advantageously treated on the same principle. I have found it, indeed, peculiarly successful with recently-imported bulbs of Sprekelia formosissima.

In conclusion, I would suggest the interest that might arise from the institution of a series of experimental researches in detail upon the relative progress and ultimate development of two Hyacinths, the one blown in the water-glass, and the other by the system of deep plunging. It would, at any rate, be difficult to conceive conditions more opposite to each other, either in a physiological or a floricultural point of view.

*Tangier House, Taunton, November 25, 1843.*

## ARTICLE VI.

### ON THE CULTURE OF PELARGONIUMS.

BY C. C.

I HERE forward a few remarks on the culture of Pelargoniums, which, if followed out, cannot fail of the most complete success. The plan is this. The latter part of May is the best time to strike the cuttings. One great reason that there are so many disappointments in obtaining a fine bloom is owing to the cuttings being struck late in the season, so that there is no time for hardening the plants before winter arrives. The consequence is, the plants are weak and sickly till late in the following season, and the blooms are few and small. Suppose the cuttings to have been struck at the time I recommend, about the latter part of June they will require potting off: after this they may be kept in a cool frame for about a fortnight, and then gradually exposed to the full air; they should then be placed on a dry bottom, so that the roots may be prevented from running down into the ground. They should be placed, too, so that they may be screened from the violent heat of the sun for about three or four hours in the middle of the day. They may remain in this situation till the beginning of September, when they must be repotted. This must be carefully attended to. Then place them in a cool frame; they must have the full air all day, and place triggers under the sashes at night. The sashes overhead will prevent slight frosts from injuring them. At this potting most of them will have made very strong shoots; they, therefore, must be shortened to about three eyes; this will induce them to throw out several very strong shoots, about two inches long, by the latter part of October. They may remain in this situation, with proper protection, till the beginning of March, giving but very little water. When they begin to grow, examine them to see if any of them want potting; the strong growing kinds should not be in less than six or seven inch diameter pots. If it be desired to bloom them early, give them a slight lining; but if a little patience be exercised, and not give them much artificial heat, they will amply repay by a more vigorous and splendid bloom.

If these few remarks on one of our most admired class of plants are carefully attended to in practice, the most desired success will follow. Old plants will not do, neither will younger.

# PART II.

## LIST OF NEW AND RARE PLANTS.

**Bassiæa paucifolia.** Few leaved. (Bot. Reg. 63.) Leguminosæ. Diadelphia Decandria. (Synonym B. virgata.) This very neat species has been raised from seeds sent from the Swan River Colony to R. Mangles, Esq., of Sunning Hill, in Berks. We have seen several specimens of it in bloom in the collection of New Holland plants at the Clapton Nursery. The plant is readily kept as a dwarf compact bush by stopping the leading shoots, and when so treated, blooms much more freely. The pretty pea-formed blossoms of a bright yellow and crimson red colour, each being near half an inch across, are both interesting and showy. It well deserves a situation in the greenhouse.

**Cirrhopetalum auratum.** Gold-edged. (Bot. Reg. 61.) Orchidaceæ. Gynandria Monandria. A native of Manilla, and has bloomed with Messrs. Loddiges. It is a very singular species, rooting profusely round the branches of a tree or piece of wood, and hangs down gracefully therefrom, producing umbels of flowers which are singularly balanced in the air, the strap shaped lateral sepals looking like so many party-coloured ribbons of crimson red, yellow, and purple, mottled, spotted, and striped, collected into a balloon.

**Cycnoches ventricosum; var. Egertonianum.** Sir Francis Egerton's Variety. (Bot. Mag. 4054.) The flowers are produced in long racemes, each blossom is about an inch and a half across, of a pretty purple colour inside, the outside green with a slight purple tinge spotted with deep purple.

**Diplolæna Dampierii.** Dampier's Diplolæna. (Bot. Mag. 4059.) Rutacea. Polyandria Monogynia. A native of Western Australia. It is a moderate sized shrub, blooming freely in the greenhouse in April and May, producing a very pretty appearance. The flowers are crimson and yellow, produced in drooping heads near two inches across. The florets in each head are numerous.

**Barringtonia speciosa.** The showy. (Pax. Mag. Bot.) Myrtaceæ. Monodelphia Polyandria. This noble plant grows to the size of a small tree, but with management can be bloomed in the stove as a dwarf bush of the height of three or four feet. It grows plentifully in the various parts of India, China, &c. The leaves are a foot in length, of a bright shining green. The flowers are produced numerously, in an erect thyrse, white, with a vast number of deep blood-coloured stamens. A plant has recently bloomed under the management of Mr. Dodds, gardener to Colonel Baker, of Salisbury, the flower spike being near two feet long. Mr. Dodds withheld water from the plant from November to about the middle of March, it was then duly watered and started into growth. About the middle of May it had made shoots a foot long, when he turned it out of the pot, shook nearly all the soil away and cut back the roots; then repotted it into a twelve-inch pot, in a mixture of charcoal, loam, sand, and peat, and in a month afterwards it threw up a fine spike of flowers. The flower is highly fragrant, something like the night blooming cereus, but even more powerful.

Epiphyllum Russellianum.—Duke of Bedford's. (Pax. Mag. Bot.) Cactaceæ. Icosandria Monogynia. The habit of the present plant is similar to E. truncatum. The flowers are of a pretty crimson violet colour, very distinct and handsome. It usually blooms from October to May, thus rendering it a very delightful winter flowering plant. It was discovered by Mr. Gardner on the Organ mountains of Brazil. It is in the collection of Messrs. Rollisson, at Tooting.

Hibbertia perfoliata.—Thorough-wax Hibbertia. (Bot. Reg. 64.) Dilleniaceæ. Polyandria di-Pentagynia. A native of the Swan River Colony, and is a most interesting and beautiful greenhouse shrub, growing freely and blooming profusely. It thrives in a compost of equal portions of peat, loam, and sand. The flowers are of a beautiful bright yellow, with a circle of clear white running round near to the margin of yellow, producing a pleasing contrast. Each blossom is about an inch and a half across. The plant deserves a place in every greenhouse.

Oncidium bicolor.—Two-coloured. (Bot. Reg. 66.) Orchidaceæ. Gynandria Monandria. Sent from the Spanish Main to Messrs. Loddiges, with whom it has bloomed. The flowers are produced in a branching panicle, each blossom being about an inch across, of a bright yellow marked and spotted with red. The lip, which is of a clear yellow above, is white at the underside.

Rhododendron Aprilis.—Garden Variety. (Bot. Reg. 62.) The Hon. and Rev. W. Herbert, Dean of Manchester, has raised this very neat flowering variety from seed of R. ponticum, fertilized by the Davurian Rhododendron. It blooms in April, for which reason the specific name is given. The flower is nearly white, with a beautiful pink, increasing in tint as it extends to the edges of the petals. The two upper petals have numerous spots of yellow upon them. It is a hardy variety, and well merits a place in every collection of the lovely tribe.

Saxifraga ciliata.—Fringed Saxifrage. (Bot. Reg. 65.) Saxifragaceæ. Decandria Digynia. A hardy perennial, requiring the same treatment as the old S. crassifolia. The flowers are produced in a panicle, white with strong veins of a slight pink colour.

Statice rytidophylla.—Rasp-leaved. (Bot. Mag. 4055.) Synonym, S. Dicksoni. Plumbagineæ. Pentandria Pentagynia. A shrubby species, growing about two feet high. The flowers are produced in a large panicle, of a beautiful rose colour.

Stephanotus floribundus.—Copious flowering. (Bot. Mag. 4058.) Asclepidaceæ. Pentandria Digynia. This very attractive and noble climbing shrubby plant is a native of Madagascar, and was introduced into this country by Mrs. Lawrence of Ealing Park, where in the stove, trained to a wire trellis about eight feet high, we have seen it on several occasions in profuse bloom. The flowers are produced in umbels of eight or ten in each. The tube of the flower is about an inch long, and the expanding limb an inch and a half across, of a beautiful waxy white, which in contrast with the fine dark green foliage gives a fine effect. We doubt not but it blooms freely if grown in a warm greenhouse or conservatory. As it can now be purchased for a few shillings each, it deserves to be extensively grown.

Veronica speciosa.—Showy-flowered. (Bot. Mag. 4057.) Scrophularinæ. Diandria Monogynia. A native of New Zealand, discovered by Mr. Cunningham growing on hills in the locality of the Hokianga River; it is expected to be hardy, but at all events the winter protection of a cool frame will be sufficient to preserve it, and of course the greenhouse shelter will be decisive, and as it is so beautiful a flowering plant it well deserves to be in every one. In its native country the shrub attains the height of from three to six feet, very branching, each branch bearing several spikes of flowers, each spike being about three inches long, and one and a half in diameter. Before opening the flowers are of a red-purple, afterwards of a rich blue-purple. It is a clean, healthy looking plant, somewhat the appearance of Lisianthus Russellianus, but is shrubby and an evergreen. Mr. Cunningham observes respecting it, "Of all the New Zealand plants we know of none more to be desired wherewith to enrich our collections than this remarkable and beautiful Speedwell." It has bloomed in the collection of Mr. Knight, nurseryman, King's-road, Chelsea.

### PLANTS NOTICED IN BOTANICAL REGISTER, NOT FIGURED.

**Masdevallia cuprea.**—Orchidaceæ. Said to be a native of Cayenne, and sent to this country from Hamburgh. Upper sepal copper-coloured, the lower dark purple, having a copper-coloured point.

### PLANTS OBSERVED IN NURSERIES, &c.

**Clerodendron** (new species).—In the collection of Mr. Glendinning at Turnham-green. It is of the habit and appearance of C. squamatum, having deep scarlet flowers.

**Potentillas.**—Mr. Young of the Epsom Nursery, has raised two beautiful seedlings; one is in the way of P. Hopwoodiana, having a larger flower, with less of the coloured tinge; the other is a large white-flowered one.

**Sipanea carnea**—A hothouse shrubby plant, which has recently bloomed in the collection of Messrs. Rollissons of Tooting. The flowers are something in the way of an Asclepias, nearly white, and produce a pleasing appearance.

**Sagittaria sagittæfolia plena.**—This double flowering arrow head is a very interesting addition to the aquatic plants. The flowers are of a pinkish-cream colour. It is in the collection of Messrs. Rollissons, and is quite hardy.

**Cattleya marginata.**—This very beautiful addition to the fine Cattleyas previously bloomed in the collections of this country has been made by Messrs. Loddiges. The flowers are of a pretty rosy-crimson, with a very clear white margin, producing a striking effect.

# PART III.

## MISCELLANEOUS INTELLIGENCE.

### QUERIES.

**On Show Dahlias.**—A constant Subscriber will be obliged by some friend giving him the names and colours of twenty-four of the best Show Dahlias.

C. C.

**On Frithilaria Persica.**—The Editor of the Cabinet will much oblige a constant reader if he will inform her in the January Number how to treat the large bulbs of the Frithlaria Persica, as she has just received some bulbs and would like to know whether they do better as house plants or in the open border. A hint on suitable compost for them at the same time will much oblige

Felton, December 14, 1843. Elizabeth.

[It is perfectly hardy, and requires to be treated as the common Frithlary in all respects. In a sandy loam mixed with a portion of peat the plant grows vigorously.—Conductor.]

On the Culture of Cape Bulbs.—It will be conferring a great favour on one of your earliest subscribers if you, or any of your numerous correspondents will have the kindness to give some information, in one of the earliest Numbers of the Cabinet, on the best method of treating the superior kinds of Cape Bulbs so as to make them flower freely. I received a number last April from the Cape, such as Brunsvigia multiflora, Josephina falcata, ciliaris, pumila, &c. Hæmanthus tigrinus, toxicarius, and puniceus, Cyrtanthus odorus and obliquus, Vallota purpurea major, Albuca filifolia, and several others. Last October I planted them, inserting about half the bulb in the soil, in sandy peat. B. Josephina has shot up a cluster of nine leaves nearly six inches high already; the others, with the exception of the Tigrinus, Vallota purpurea major, Veltheimia viridifolia, and one or two others, have not yet moved, but the bulbs are quite plump and fresh. I have hitherto watered them but sparingly, say about twice a week, a little at a time over the top of the pots, would a little more moisture be advisable? I received at the same time with the bulbs, a number of different sorts of seeds from the Cape, which I immediately sowed in pots of light soil, they nearly all grew and I have at present a great many very fine plants. I have not the convenience of either bothouse or greenhouse, only a cool frame and the sitting-room windows, to rear any of my flowers, I have enclosed a list of the seeds, and perhaps you will be kind enough to insert a paper occasionally in the Cabinet on the most approved methods of cultivating the different sorts.

December 16, 1843.

[Do not give more water than is named till the end of February. If there be the convenience of a hot-bed frame at work, place the pots therein, and keep the soil moist, not saturated; the increased temperature will, in all probability soon induce the bulbs to push, when an increased admission of air must gradually be given. As soon as they exhibit flower stems they may be removed, if required, to the sitting-room or cool frame for blooming. We hope some one of our readers, who successfully cultivates Cape Bulbs to some extent, will favour our Correspondent with the detail of management at an early opportunity. We will endeavour to comply with the wishes expressed as to the articles on the culture of the various plants named in the list received.—Conductor.]

On Arums.—A few hints on the management of Arums in the January Number will much oblige

Felton, December 14, 1843.

Elizabeth.

[There are stove, greenhouse, and hardy kinds. Those grown in pots require a rich loamy soil, with about one-third of peat added, and to have a free drainage. The hardy kinds grow vigorously in the same sort of compost, taking care to have a dry substratum. The wild Arum of this country flourishes best on dry banks, hedge-rows, &c.—Conductor.]

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On Passifloras, &c.—You will confer a favour on a constant subscriber to your valuable magazine by answering the following in the January Number. I have a vinery, which I commence forcing about the middle of February, and am anxious to know whether I can successfully grow the "Passiflora quadrangularis," (Granadilla.) Plants are kept in it during the winter, so that there is a greenhouse temperature; will it survive the winter in this place? there is a pit inside. in which figs are planted; could it not also be planted at one corner of the pit, and trained to some trellis fixed for the purpose? By answering the above, stating the price per plant, and if any other Passiflora will fruit in the same situation, will much oblige

Doncaster, December 1, 1843.

W. B.

[Like other plants, it requires a season of rest, and the situation named will afford it in winter. The branches might be lowered at that season, and thus be safely preserved from any casual injury which otherwise, though not likely, might occur. Plant at the warmest part of the pit. With such precaution it will, no doubt, succeed well. We have known several instances where, under similar circumstances, it has. Passiflora edulis and P. laurifolia fruit abundantly under the same treatment as the Granadilla. They may be procured at 2*s*., or 2*s*. 6*d*. each at most.—CONDUCTOR.]

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ON BUDDING ROSES.—Being a novice in the art of budding roses, I shall feel much obliged if either yourself, or any one of your numerous correspondents, will kindly inform me what is the best way of pruning the stocks. I have now procured two hundred, having last year's shoots left five or six inches long. Should these be left, so that when they put out in summer I shall bud on two years' old wood, or is it better to prune the stock to a single straight stem, and then bud on the wood of one summer's growth. X. X.

[An article on the subject is inserted in the Number for April, 1842, Vol. x., to which we refer our correspondent for the entire process, extracting only the following:—"Transplant strong, clean, straight stocks, as just mentioned; cut them over at a height to suit your taste, say from three to six feet; and cover the wounds with a cement, directions for making which will ensue. In the spring, when they begin to shoot out, rub off all buds but three or four at the top, so situated as to promise an uniform head. Carefully pinch off fresh buds, which arise afterwards, and remove suckers as soon as they appear. In the progress of summer the stocks will require to be staked, and demand continued attention to the disbudding of them (of other shoots which push) and the regulation of those retained for budding upon." "Early in July displace the thorns where it is designed to make incisions for the buds."

"Summer budding should not be commenced before August, although tolerable success may attend the execution of it in July. But worked thus early (July) a portion of the buds will commence growing the same season, at a period when it is too late to ripen their wood sufficiently before the commencement of frost, and thus be likely to sustain injury, or be wholly destroyed."

Our correspondent will see that if the stocks be high enough for the purposes desired when planted, that the head of the stock should be cut off below the shoots already existing, so that new ones (which are necessary for budding upon) may be produced the following season. If, however, any stock would be too low to serve designed purposes, if the present head was cut off, then prune back the existing shoots to one bud each, which, on pushing, will furnish new shoots for budding upon next August.—CONDUCTOR.]

ON WHITE FLOWERS, &c.—A constant subscriber to the CABINET begs to be informed in the next Number what are the names of half a dozen of the best hardy showy *white* perennials, as the inquirer has too few *white* flowers in her ornamental flower-garden. She cares more about the pureness of the white and size of flower than newness of sorts.

Is American Groundsel always an annual?

What is meant by plants being herbaceous; is it that they die to the ground like Salvia patens? An answer by the Conductor will oblige.

Linum monogynum.
Lilium japonicum.
Phlox omniflora.
——— tardiflora.
suaveolens.
Achillea ptarmica, double.
Campanula glomerata, single and double white.
Campanula latifolia, single and double white.
Campanula persicafolia alba. Pyrethrum, double Feverfew.

[The above are all pure white, and can be readily obtained at a very low price.

The double-flowered groundsel (Senecio elegans) is easily kept from year to year, by taking off slips in August, and striking them in pots, preserving them in a cool frame or greenhouse through winter.

HERBACEOUS, when the stems die down annually.—CONDUCTOR.]

## REMARKS.

## LONDON HORTICULTURAL SOCIETY, REGENT-STREET.

On December 5, a paper was read respecting the cultivation of Oxalis Deppei. A specimen of Whitney's (of Shrewsbury) protecting material was also shown to the meeting, with two specimens of a similar kind that might be used for the same purpose from Halifax; the latter, however, were not so transparent as the former, which admits nearly as much light as ground glass, and promises to be very useful in many instances where much light is not required. One great advantage is its cheapness; a sash that would cost 12*s*. or 13*s*. to be glazed in the usual way, may be covered with this material for the trifling expense of 9*d*. or 10*d*. It is perfectly impervious to water, and will be useful in gardens for many purposes. From the circumstance of its being water-proof, it will also make a good protection for fruit-tree blossoms in spring in damp wet weather, or from cold winds that generally prevail about that season. The material is common calico, painted over with a fluid, the composition of which is not known, but is sold in bottles and may be easily applied by means of a painter's brush. From F. Cox, Esq., of Stockwell, were Lycaste Skinneri, a pretty species from Guatemala, with broad light-coloured petals and dark purple labellum: this has, besides being very showy and handsome, the good property of continuing long in bloom; also Cattleya guttata, and the old Cymbidium sinense, with dark-brown fragrant blossoms; this has been known to keep blooming in a room for the space of six or eight weeks, and during the whole time the house was quite perfumed with its fragrance. In the same collection were likewise Oncidium bicallosum, having a fine spike of dark-spotted yellow flowers; this is not very common, and is a good species of that handsome genus. Mr. J. Robertson, gardener to Mrs. Lawrence, sent Stenorhynchus speciosus, having broad dark-green foliage, and ten spikes of flesh-coloured flowers; also Odontoglossum grande, Dendrobium denudans, with small white blossoms, and a plant on a block of the rare Epidendrum Skinneri, with fine purple blossoms; this is very difficult to cultivate; according to Mr. Bateman it has been found to succeed well in a vinery where there was a cool low temperature. From the same collection were likewise Cypripedium venustum, Lycaste Skinneri, with well-coloured flowers, Rodriguezia secunda, and Epidendrum viscosum, with greenish yellow petals and white-fringed labellum; also Lælia albida, with small sweet-scented white blossoms, Maxillaria cucullata, and another species with small dull-brown flowers. There were likewise Erica Sebana lutea, and a small specimen of E. Lamberti rosea, covered with pretty flesh-coloured blossoms; a Banksian medal was awarded for the first four plants. Mr. Green, gardener to Sir E. Antrobus, Bart., exhibited a plant of Amaryllis aulica with large scarlet flowers; and A. calyptrata, with light-green blossoms. From J. Allnutt, Esq., were Camellia Donkelærii, two plants of Erica caffra, and two particularly well-grown specimens of E. hyemalis, having long shoots, densely covered with white and red flowers; this species is valuable, from its producing a profusion of bloom at this dull season of the year; a certificate was awarded for the two specimens of E. hyemalis. Mr. W. Brazier, gardener to W. H. Story, Esq., sent a hybrid specimen of Epacris variegata. From Mr. Wright, of Hackney, was a collection of cut flowers of Chrysanthemums, among which were some excellent blooms; for these a certificate was awarded. From W. Rashleigh, Esq., was fruit of Benthamia fragifera. This plant was introduced some years ago from the North of India. It is a very handsome evergreen shrub, flowers in profusion during summer, and produces an abundance of large reddish fruit in autumn. It is not hardy, except in the warmest parts of England. The fruit when ripe bears some resemblance to that of an Arbutus. From the garden of the Society was a collection of Chrysanthemums; six of these were watered on the 28th of July with superphosphate of lime, in the proportion of a quarter of a pound to a gallon of water for each plant. In the course of three weeks after application the leaves had acquired a very dark green; so apparent was the effect produced on the plants that a stranger could have selected those that had been watered with this from a collection of 150, among which they were growing, without ony other mark or distinction. This substance seems to have a beneficial effect on most plants, and, unlike some other artificial manures, it may be applied in different proportions without the least risk of injuring the plants. Had it been given to the Chrysanthemums at an earlier period, the result might have been probably still more striking.

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**Schizanthus retusus and S. Hookerii.**—I had seeds of the Schizanthus retusus and Hookerii given me by a friend in the spring of 1839, from these I raised plants, potted them in rich loam, part of which I repotted in July into much larger pots and kept in the greenhouse; others I planted in rich soil in the open border in a warm part of my flower-garden. The plants were very carefully attended to in watering, &c., but not a single flower stem pushed. I kept those grown in pots in the greenhouse during winter; those in the bed were taken up in November, planted in a box of soil which I kept too in the greenhouse. In March I repotted half of those in pots in a rich soil, but not one plant bloomed; I turned out those which survived in the box into the border, as well as the remnant in pots which I did not repot in March, not one bloomed in the border, by accident a plant which had not been repotted was placed in a warm situation upon a stratum of four inches of coal ashes and gravel, the roots had descended into the substratum, and the plant pushed vigorous flower stems and there bloomed very freely. It struck me that I had erred by using so rich a compost and allowing too much root room. The following season I planted some in the open border, which had a prepared substratum of brickbats and coal ashes mixed with gravel four inches deep, upon this I had eight inches of poor soil and then supplied water as circumstances pointed out to be necessary, the plants bloomed most beautifully. I grew some in pots, had a free drainage and a poor soil, giving due attention to watering, &c., and nothing could be more satisfactory than their bloom in the greenhouse from July to October.

Isle of Wight, November 3, 1843. T. Parnell.

To protect tender Plants in Winter.—Noticing in the last Number of the Cabinet some remarks on protecting tender plants through winter with furze branches, &c., I am desirous that my successful mode of treatment with the tender kinds of tea-scented Roses may be inserted. I have several beds of them on my lawn. I stuck in the ground around each plant some furze branches, and also a close row round the edge of the bed. This being completed, I had a quantity of dry leaves scattered between the furze twigs, filling up as high as the tops of the Roses which, being dwarf, was about a foot. To prevent the leaves being blown away, I laid a number of furze branches over them. By this mode of protection I have for several winters preserved the plants from being injured in the least degree, and by the twigs keeping the plants open from the leaves, air is admitted which, while it is tempered so as not to injure them, it prevents damage arising from being entirely overhead, and air thus much excluded. Early in the spring I take away gradually the covering, leaves, &c. My plants have grown vigorously and bloomed profusely every season. Before I put to the winter protection, I just point in a portion of well-rotted cow-dung, and prune the plants as required. Rosa.

## FLORICULTURAL CALENDAR FOR JANUARY.

Greenhouse.—This department should have good attendance during this month.

The herbaceous kinds of plants will require occasional waterings, but less frequent and in less quantities than the woody kinds. Succulents, as Aloes, Sedums, &c., should be watered very sparingly, and only when the soil is very dry. When water is given it should be as much as will moisten ALL the soil, where water is only given to moisten the soil an inch or two at the top and the other kept quite dry, the result is generally certain, namely, the death of the plant. The plan to be attended to is, water only when necessary, but a full supply when it is done. Air should be admitted at all times when the weather is favourable, or the plants cannot be kept in a healthy state. When the weather is *damp*, foggy, &c., do not give air then, let a *dry* air only be admitted. If any of the Oranges, Lemons, &c., have naked or irregular heads, towards the end of the month, if fine mild weather occur, begin to reclaim them to some uniformity, by shortening the branches and head shoots: by this attention they will break out new shoots upon the old wood, and form a regular head; be repotted in rich compost in April, reducing the old ball of earth carefully, and replacing with new soil. After shifting, it would be of great use to the plants if the convenience of a glass case could be had in which to make a dung-bed that the pots might be plunged in; this would cause the plants to shoot vigorously, both at the roots and tops. Repot Amaryllis, &c. Tender and small kinds of plants should frequently be examined, to have the surface of soil loosened, decayed leaves taken away; or if a portion of a branch be decaying, cut it off immediately, or the injury may extend to the entire plant and destroy it. Gloxinias, &c., now beginning to push, should be potted.

Auriculas should, at the end of the month, be top-dressed, taking off old soil an inch deep, and replacing it with new; give air freely when dry weather.

Bulbs, as Hyacinths, &c., grown in water-glasses, require to be placed in an airy and light situation when coming into bloom. The water will require to *be changed* every three or four days. The flower-stem may be supported by *splitting a stick at the bottom into four portions*, so as it will fit tight round the *edge of the glass at the top. Beds of Hyacinths* will require attention if severe weather occurs, also beds of Tulips, &c.

The seed of Calceolarias should be sown at the end of the month, and be placed in a hot-bed frame, also cuttings or slips be struck, as they take root freely now.

Cuttings of Salvias, Fuchsias, Heliotropes, Geraniums, &c., desired for planting out in borders or beds during spring and summer, should be struck in moist heat at the end of the month, in order to get the plants tolerably strong by May, the season of planting out.

DAHLIAS.—Dahlia roots, where great increase is desired, should now be potted or partly plunged into a little old tan in the stove, or a frame, to forward them for planting out in May. As shoots push, take them off when four or five inches long, and strike them in moist heat.

Herbaceous Perennials, Biennials, &c., may be divided about the end of the month, and planted out where required.

HYDRANGEAS.—Cuttings of the end of the last year's wood, that possess plump buds at their ends, should now be struck in moist heat; plant one cutting in a small pot (60's). When struck root, and the pot is full of roots, repot them into larger; such plants make singularly fine objects during summer.

Mignonette, to bloom early in boxes or pots, or to turn out in the open borders, should now be sown.

Rose Trees, Lilacs, Pinks, Hyacinths, Polyanthuses, Narcissus, Honeysuckles, Persian Lilacs, Primroses, Rhodoras, Persian Iris's, Sweet Violets, Cinerarias, Hepaticas, Aconites, Jasmines, Azaleas, Lily of the Valley, &c., should regularly be brought in for forcing.

TENDER ANNUALS.—Some of the kinds, as Cockscombs, Amaranthuses, &c., for adorning the greenhouse in summer, should be sown by the end of the month.

Ten-week Stocks, Russian and Prussian Stocks, &c., to bloom early, should be sown at the end of the month in pots, placed in a hot-bed frame, or be sown upon a slight hot-bed, also some other of the tender kinds to prepare them strong for early summer blooming.

Protect the stems of tender plants with Furze branches, &c. The stems of tender climbing Roses are screened by such precaution.

Chrysanthemums, the heads of decayed flowers, should be dried, and saved for the seed which probably they possess, and be sown in spring and raised in a hot-bed frame.

*Camellia Jap. Lowii.*

THE

FLORICULTURAL CABINET,

FEBRUARY 1st, 1844.

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# PART I.

## EMBELLISHMENTS.

### ARTICLE I.

### CAMELLIA JAPONICA LOWII.

Ternstromiaceæ. Monadelphia Polyandria.

This very strikingly handsome Camellia is an hybrid, raised by the same very successful amateur grower who first sent out C. Rubescens, C. Lepida, C. Lentonia, and some others of the very finest varieties now in the English as well as the Continental collections. It flowered in the select collection at the Clapton Nursery, in the spring of last year, where it was seen by many of the most extensive growers in the kingdom, and also by several of the best and most competent judges, amongst whom may be named Mr. John Smith, of Dalston, and Mr. G. Press, of Hornsey, both well known in the horticultural world as successful cultivators of this noble and splendid family of plants; these gentlemen pronounced it to be a first-rate flower in every respect. A plant in bloom was shown at the London Horticultural Society's meeting on the 18th of April, (see 'Gardeners' Chronicle,' April 22, page 267). We must observe, however, that the reporter for the "Chronicle" made a mistake in stating *that it was* the same as Messrs. Low and Co. had exhibited at a previous meeting, the one the reporter alluded to being C. Guthriana, a small flower, and as round as a Ranunculus bloom, in no respect resembling the variety now figured. C. Lowii deserves to be grown in every collection, however select.

## ARTICLE II.

## OBSERVATIONS ON THE CULTURE OF THE RANUNCULUS.

BY MR. GEORGE LIGHTBODY, OF FALKIRK, SCOTLAND.

[*Continued from* p. 8.]

### BLOOMING.

According to the season being forward or the reverse, the flowers will commence to bloom from the 7th to the 21st of June. They will then require to be covered through the day to shade them from the sun, exposure to which spoils their beautiful colours. This is best done by having a low stage rising about two and a half feet at the sides of the beds and four feet in the centre. The awning is easily managed, when tied to two light rollers; in this form it is put on and taken off in an instant. When the sun is powerful, keep it down on the side next the sun near to the ground, but on the other side it may be partially rolled up to admit air, and should visitors arrive to see the bloom, the roller can be fastened to posts so as to enable visitors to walk under it, without exposure of the flowers to the sun. In fine weather the awning may be taken off at night and put on in the morning. Never allow the blooms to be exposed to the rain. During the bloom, water may be given every night as formerly recommended, but when the bloom is on the decline, cease to water. By using these precautions the bloom may be kept in perfection for a period of three weeks or more, to the great delight of all beholders, for there is nothing in nature more dazzling and striking than a mass of choice Ranunculus in full bloom. The recollection of a sight of the kind is lasting. The reason why I recommend a low stage is to prevent the flower stems being drawn. This is uniformly the case when a high stage is used.

### MATURING THE ROOTS.

When the bloom is past, the object then is to have the roots ripened in fine condition. Let the beds be exposed to the full action of the sun; but it will be advisable to keep up the stage and have the awning in readiness to cover with in the event of wet weather setting in, for there is danger of the tubers beginning to grow again. Should the beds become saturated with moisture during hot weather, a gentle rain will do no harm, but avoid too much. Should the tubers of any unfortunately start, my practice is to thrust a trowel diagonally into the soil, cutting the fibres of the plant a few inches below the surface, and gently raising the ball a little above the level of the bed. This practice I generally find successful; but should the plant thus treated continue to grow, my next resource is to take up the ball and put it into a Carnation pot, among some dry soil, and put it under glass. Should this fail, and the root is valuable, let it grow on, but put it into a greenhouse or frame where it can be protected from the risk of frost till the root attains to maturity.

### Taking up the Roots.

Cultivators who have valuable collections should never wait till the foliage of the whole are withered before they commence taking up; my advice is to look over the plants every day, and take up all whose foliage is withered, and continue doing so till the whole are secured. Clean the roots from soil; cut off the flower-stems and foliage with a pair of stout scissors close to the crown; shorten the fibres and place the roots in the bags or boxes appropriated for keeping them in, in a dry airy situation out of the sun. In the course of two or three days after taking up, look over the roots, they will then be in a soft and partially shrivelled state; then is the proper time for separating the roots without danger of breaking them. Mouldiness must be guarded against, by turning the roots occasionally till they are perfectly dry. Keep them in a dry place till planting-time comes round again.

### Raising Seedling Ranunculus.

The soil I use is rich maiden loam; in summer it is exposed to sun and air till it is quite dry; it is then broken fine by hand, and all worms and extraneous matter removed; it is then kept in a warm dry place till wanted. About the beginning of January I begin to prepare my boxes for sowing. I do this by mixing some finely sifted leaf-mould, also in a dry state, with the prepared loam, searching carefully for worms. This mixture is placed in the lower part of the box. On the upper the fine loam alone is placed so as to be in contact with the seed. Fill the box within half an inch of the top, then press the surface level with a piece of smooth board. The best time for sowing is about the end of January. Previous to doing so, moderately saturate the soil with tepid water through a very fine rose, that will cause the water to fall like dew. Should the watering occasion any inequalities on the surface, fill them up and press all smooth again with the board. The best way to sow the seed is to take but a few in hand, and let them fall singly if possible, distributing them equally just clear of each other over the surface of the box. When this is done, cover the seeds lightly with some of the fine mould till they are hid; then give another watering: this will bring many of the seeds into view. Cover those that are exposed and place the box into its situation. The best situation is the front shelf of a greenhouse, or, for want of this, the window of a fire-room looking to the south. Water every second day at first, and cover any seeds that appear: when the sun becomes powerful, give daily waterings.

Guard against frost, for should the soil be frozen while the seeds are germinating, they will to a certainty be destroyed.

In four or five weeks, according to the amount of sunshine, the young plants will begin to appear. In coming up, many of them will appear with the bran of the seed attached to the young leaves, displacing the soil about the neck of the plant. In this case, some of the fine soil will require to be let fall about the plant to fill up the cavity. Many of the young plants will also (like the Auricula) throw themselves out. Look over the box occasionally, and put those that are out into the soil again, by making a small cleft, and pressing the soil gently about the neck of the plant. When the plants have about three leaves, turn the box every second day, to prevent the plants being drawn. About the third week in March, top-dress the box. First, remove carefully, without injury to the foliage or pulling up the young plants, all the green slime on the surface. Replace this with some finely-sifted old cow-dung in a dry state; let it fall equally among the plants, then give a good watering; after the top-dressing, they will have quite a gay appearance, and will begin to grow rapidly.

The first week in April the box may be removed to a cold frame, where it may have sun and air. Protect at night from frost.

About the end of the month, when danger from severe frost is over, the box may be removed to some sheltered situation where it will get the morning sun till near noon. Water daily during dry weather till the foliage begins to wither. When this takes place, let the box become dry. Should wet weather occur just when the young roots are attaining to maturity, it will be advisable to place the box under glass. Take up the roots as the foliage withers down, and place them in a paper-bag in a dry place, where they may remain till the following February, when they are to be planted in the open ground and treated like the general stock. As the young roots are in general very small, be careful not to break them when planting: fix the claws firmly into the soil, and be certain that the crowns are uppermost. They may be planted a little closer than large roots; but small as the roots appear when planted, very few will miss blooming. It is rather a tedious process the planting a quantity of such small roots, but the enthusiastic florist will not complain at cold fingers and the time taken up to do this work correctly, for he expects to be rewarded with some fine new flowers to gratify him for his trouble and procure himself a name that will be famed among cultivators.

It too often happens that some of the young plants bloom in the seed-box: it is generally August or September before they do so. When this occurs, and there is a fine sort among them, there is no other way to preserve it than removing the box to a greenhouse or frame, where it should be kept dry and protected from frost till the root is matured.

These observations contain the practice I adopt, and I have no doubt that, if followed out, the youngest tyro may command success.

It may be asked, why all this trouble with the preparation of the soil? The answer is, experience has taught me that Ranunculus seed sown in soil whose temperature has not been much lowered vegetates much better than in soil that has been exposed to frost and rain through a part of the winter. Let any person try the difference; they will find that three seeds for one will vegetate in the prepared soil compared with seed sown in ordinary soil; besides, the larvæ of worms, &c., that may remain in the soil when laid past, will all be hatched by the time it is put through hand the second time. They will then be detected. A single worm getting into a seed-box will come up to the surface through the night, and, by disturbing the seeds, will cause much mischief, if not destroy the whole.

Such is my mode of culture resulting from the experience of many years. I can with confidence recommend it as safe and practicable. There are few persons now alive who have made more experiments in the culture of the Ranunculus than I have, but the method of culture now detailed is the only safe one that will insure fine blooms and healthy roots.

I may here mention an experiment I tried lately. In 1841, I had a bed prepared in my usual manner, for which the following February I had no roots. Not liking to lose the use of the ground, I took a crop of Lettuces from it, and towards the end of October when they were used, the bed had sunk considerably, the surface was slightly pointed with the spade, taking care not to disturb the strata of dung. On the top was placed some fresh soil. Afterwards I thought the soil in this bed might be too poor. I got a pailful of gas-liquor from the gas-works; it was diluted with water, and the ammoniac fixed by the application of sulphuric acid, and then distributed equally over the bed with a watering-pan. The bloom in this bed was very strong; many of the flower-stems were two feet in height, and the blooms averaging from three or four inches in diameter; the roots lifted also large and clean. The size of the bed was twenty feet by four feet two inches wide.

## ARTICLE III.

## FLORICULTURAL GLEANINGS.—No. 13.

### BRIEF BIOGRAPHICAL NOTICE OF THE LATE J. C. LOUDON, Esq.

BY MR. WILLIAM HARRISON, SECRETARY TO THE FELTON FLORISTS' SOCIETY.

The lamented death of this distinguished individual took place on Thursday, the 14th of December last, at the residence of the deceased gentleman, in Porchester-terrace, Bayswater, in the 61st year of his age; and as I feel certain that any well-authenticated account of so eminent a man must be acceptable to the pages of a floricultural publication, I take the liberty of forwarding the following brief sketch of his earthly career from the pen of a respectable contributor to the "Gateshead Observer."

"John Claudius Loudon, Esq. was one of the ablest, most voluminous, and useful writers that this, or, perhaps, any other country has ever produced. Few persons can form any adequate idea of his herculean labours; for though his works are deservedly popular, yet the number and variety of his publications, possessed by readers of various classes and pursuits, seldom come at one time under the observation of any individual reader. Many of his works, when viewed singly, are monuments of the most surprising skill and perseverance; and, when taken collectedly, they amount to an almost incredible result, which cannot fail to excite the highest astonishment.

" Mr. Loudon was a native of Scotland; but he removed in early life to London. He was by profession a gardener, but he devoted much time also to literary pursuits; and his first communication which appeared in print was a biographical notice of the celebrated Abelard, written for Sheraton's " Cabinet-makers' Encyclopædia," which is in the possession of Thomas Sopwith, Esq., of Newcastle-on-Tyne. Among the most useful of the works which he afterwards conducted may be mentioned the ' Encyclopædia of Cottage, Farm, and Villa Architecture,' 1300 closely printed pages of which are illustrated with 2300 engravings on wood; and incalculable benefit has been afforded to the country by the vast amount of useful and practical information it contains. His ' Encyclopædia of Agriculture and Gardening,' and many similar works, are elaborate condensations of an enormous amount of information; but, wonderful as they are, they are exceeded by his great work, the ' Arboretum et Fruticetum Britannicum,' which he published in 1838, at a cost of upwards of ten thousand pounds. This splendid work has been pronounced in the ' Quarterly Review' to be ' complete in its kind, and a standard book of reference on all subjects connected with trees;' an opinion confirmed by all the principal reviews of Europe and America.

" Mr. Loudon conducted at that time upwards of thirteen different publications, the bare enumeration of which would be of considerable length.

" In consequence of the excessive labour which he devoted to the compilation of the 'Encyclopædia of Gardening,' Mr. Loudon fell into ill health in 1821, which obliged him to have his right arm amputated, his left hand being at the same time so much injured as to leave him only the partial use of two fingers. The additional expenses to which he was thus liable, by having to employ draughtsmen and an amanuensis, and a servant to act as valet, tended materially to lessen the pecuniary advantages he might have reaped from his industry. His labours, which were continued with untiring zeal, at length finally undermined his constitution, and an attack of inflammation of the lungs terminated in chronic bronchitis, which forbade all hope of his again resuming his professional duties as a landscape gardener; and this veteran of science and literature may be truly said to have fallen a victim to that neglect which has too often been in this country the only return for the most substantial and enduring benefits.

"Those who knew Mr. Loudon in private life will long entertain a deep regret for his loss, and will always cherish a remembrance of his truly excellent character and disposition. His vast and comprehensive talents were indeed 'clothed with humility,' and were freely offered wherever they could be of use. He was most affectionate in all the relations of private life—generous in hospitality—candid in expressing his opinions—and an untiring and zealous advocate of every moral and social improvement, setting forth at all times an example of honourable industry and of public and private worth. He was a member of many of the leading scientific societies of Europe; and none have laboured with greater zeal in the several departments to which his energies were directed. He expired at noon, on Thursday, the 14th of December, after a lingering illness, to the great grief of all who had the happiness of enjoying his friendship, and of knowing those excellent qualities of his mind which alone exceeded the extent and value of his literary and scientific labours."

Felton Bridge End, January 10, 1844.

## ARTICLE IV.

### REMARKS ON THE TANK SYSTEM OF HEATING GREENHOUSES, HOTHOUSES, &c.

BY C. C. OF SOMERSETSHIRE.

Hoping that the following observations on the tank system of heating greenhouses, &c. will be in some degree serviceable to the readers of the Cabinet, I forward them for insertion therein.

The remarks will be confined at present to the tank itself, the construction of which is very liable to error, which I, as a well-wisher, would try to remove. The tank altogether should be not less than one foot six inches deep inside; it may be formed with wood, brick, or stone; if with wood, it should not be less than two inches thick. To make the tank complete, it must be lined with lead or zinc, rather more than the height of the water. About the centre of the tank, lengthways, must be set a row of bricks or stone to give circulation to the water, and to rest the covers on. The brick or stone should be about five inches high, which will be deep enough for the water; it must be covered with thick strong slates, and well cemented down: if these matters are attended to, it will prevent too much vapour in the house, which would be the case if the water was not well secured. On the slates should be placed two inches of small pebbles or coarse sand, which will cause the heat to rise in a gradual manner. There will be about ten inches to be filled up with any material as may be required. The formation being thus attended to, it will be sure to give the greatest satisfaction. The writer called at a neighbour's garden lately, and found they had just finished a large stove, and had adopted the tank system; but was sorry to find they had built the tank with stone of a very porous nature, only cementing the joints, consequently the stove was completely saturated with vapour, which would be very hurtful to ripening fruits. Excellent as the system is, if the construction of the tanks is not very carefully attended to, it will be certain to bring it into disrepute. These few hints will be quite sufficient for every thinking mind, and, as a sincere well-wisher, I rejoice to see this, the most pleasant of all pursuits, flourish with increasing vigour; and if I saw any obstacle, I would try to remove it by every means in my power. For further instructions I recommend Mr. Rendle's little book on the subject.

I intend in a short time to offer a few hints on the management and heating of greenhouses, which I hope will help to set at rest the controversy existing on the subject at present.

[We shall be glad to receive them.—CONDUCTOR.]

P.S.—There should be pipes carried from the top of the water to a little above the surface, which should be plugged, except when the vapour is wanted in the house, when they may be taken out for a short time.

## ARTICLE V.

### ON THE PROPERTIES OF THE TULIP.

BY A STAR IN THE NORTH.

THE first of which I consider to be shape. The flower should be composed of six petals, three outer and three inner; they should be alternate, and lie close to each other; they require to be broad and round on the top, and quite smooth on their edges, and of sufficient width to allow of their edges lying on each other when fully expanded; this will prevent any quarting, like Prince Leopold, which is decidedly bad; the petals should also be firm in texture, and have a little swell outwards towards the lower part of the mid-rib of the petal, which forms the shoulder, and is the cause of the flower retaining its shape. The shape of the cup when fully expanded should be a semi-oblate spheroid, the stalk being inserted in the pole, which pole should be a little depressed; this form I consider best for retaining the beauty in all its stages: it must be understood that I am speaking of a flower in full bloom, as the shape alters materially as it closes; the petal ought to be level on the top, and not the inner three higher than the outer, nor the outer ones turned back, which is the case with some flowers, as Compt de Vergennes, and some others; when a flower has passed its prime it is not uncommon, I might almost say general, for the three inner petals to become higher than the others, which arises from the three outer being in the character of the calyx, and the other the corrolla; the colour of the ground should be quite pure and rich, without stains or specks, whether white or yellow; and the base of the petals around the stamina must be quite clear of any stain or grease, otherwise it will have what we call a dirty bottom, which every amateur dislikes, as nothing short of purity there will satisfy him, it being impossible to remove that defect from a broken flower, particularly if it should possess it when in a fine state; it is also desirable that the yellow ground should have the same intensity of colour on the outside of the flower as on the inside, as some flowers, being nearly white on the outside, are rendered defective by it, and unfit for showing—certainly where they show in classes; the Duke of Clarence is an example: the white ground should have a thick fleshy petal, and be quite pure outside; indeed it is desirable that all flowers should have a thick fleshy petal. Tricolors, I confess, I am not partial to, although some of them are very handsome. The three principal classes of the florists' Tulips are the Rose (red and white), the Byblomen (purple and dark on white), and Bizarres (various colours on yellow); in each class the colour should be well defined and brilliant, and free from the breeder colour, and not liable to flush, which is bad, particularly if it arises from a delicacy of the vessels containing the colouring matter, as it then becomes a character of the kind; some sorts flush after they have been in flower for a day or two; the more general cause of flushing is the confined damp in the stages at night, inducing the flower to imbibe more moisture than they require, which ruptures the vessels, and when the sun rises the colour is diffused by the heat; this is merely accidental, and does not affect the general character of the flower. The feathered flower is the one I most prefer, which is the feather commencing on the edge of the lower part of the petal at a short distance from the stamina, and continuing quite round to the same distance on the other side of the petal, being marked deepest on the top; each petal ought to be alike; the rest of the ground colour to be quite clear from patches or spots, which would destroy the beauty of the bloom. The flamed flower, in my estimation, should have this feather on either side, and the points touching the feather; at the same time sufficient of the ground colour must be preserved between the flaming to show it to advantage. The more general character is a flame without any feather; it forms a star-like appearance, which is very beautiful. In all cases where there is a second colour in the flame, it should be margined by the darker, as it prevents any running taking place. The single stripe up the petal is curious, and many of the other distributions of colour showy, but can scarcely be called perfect. However equally they may be placed—whatever the character may be—there should always be a circle of the ground colour round the stamina; the stem should be strong enough to keep the flower erect without the aid of a stick; it should also be elastic, and neither too tall nor short for the size of the flower.

January 12, 1844.

## ARTICLE VI.

### REMARKS ON GROWING CARNATIONS IN POTS.

A correspondent, in an Article inserted in the Cabinet, and who grows his Carnations and Picotees in the open ground, requested to be furnished with some suggestions with the view to their better protection from the ravages of the earwig, which, at the season of their flowering, as is well known, is very numerous, and not only destructive to the blooms, but equally so to the seed, to which it obtains access just at the period of ripening. To this request no one has yet replied. I shall, therefore, make a few observations upon the subject, and point out the most effectual, as well as most economical, plan that has occurred to me for the attainment of so desirable a result.

Carnations and Picotees are usually grown in pots, not only that they may be more easily protected from insects and the weather, but that the necessity for stooping to attend to the flowers when in bloom, and for the purpose of layering afterwards, may be avoided; the troublesome process of which latter operation, when the plants are in the ground, is sufficient to deter many persons from attempting that mode of culture. The really enthusiastic florist overcomes every difficulty, and thinks little of trouble; but to those who are less ardent, the act of placing themselves on their knees, with their heads bent downwards, for a few hours, is by no means an amusement. It is the first of these considerations that has, in a great degree, caused the Pink to be less cultivated than it deserves, and has induced many persons to attempt to grow it in pots, in order to avoid so much stooping. But besides these arguments in favour of pot culture, many persons who grow Carnations and Picotees also cultivate the Tulip, over the bed of which, when they are out of bloom, a stage is easily erected, with every means of protection, and the greatest facility in paying the requisite attention; but to those who have no Tulip-bed, and who do not choose to incur the expense of a stage and awning, growing the Carnation in pots does not offer similar advantages, for they are then quite as much exposed to the attacks of insects and to every vicissitude of weather as when in the open ground. The blooms themselves may be easily protected by caps or shades from the sun; but the plants materially suffer from the heat that generally prevails at that period of the year, unless extra attention be paid to them in watering and top-dressing. To those who cultivate for sale, there is another objection to growing the Carnation in the ground, in the too robust layers that are produced; but this will apply, in some measure, to amateurs, inasmuch as moderate-sized, healthy plants are generally the best, both for stock and blooms.

It is almost impossible to conceive that under any other system these flowers can be brought to a greater state of perfection than that attained by some of our successful cultivators; but I have no doubt that, with those who are not so skilful, equally fine blooms may be produced in beds occasionally.

# ARTICLE VII.

## REMARKS ON THE PROPAGATION OF PLANTS BY CUTTINGS.

BY A GERMAN AMATEUR GARDENER.

As an amateur gardener, having a hothouse, greenhouse, and conservatory, well stocked with the best kinds of plants to which each erection is adapted, I have had considerable practice in propagating by cuttings the sundry plants I possess, as also in cuttings obtained elsewhere; and from the success I have realized I am induced to forward the following remarks on the process, hoping they may be serviceable to other persons, who, like myself, derive pleasure in so interesting a pursuit.

When I obtain cuttings at a distance, I find it in most cases essential to success to have the ends which have been cut dipped in puddle, or stuck into a portion of clay, for the crude sap in the cutting is not raised by endosmose but by the process of evaporation; care must be therefore taken that the surface of the cut does not become dry before being put in the earth, and air get into the lower end of the vessels, for as soon as this takes place only very strong shoots are capable of drawing up moisture, as has been proved by the experiments of various philosophers. The cuttings should therefore be stuck in wet sand, clay, &c. if they cannot immediately be put where they are intended to remain, although it were better to avoid this. If, however, they are such as ought to lie a day or two, in order to insure success, as some acacias, &c., it ought to be in a damp place; and the precaution must be taken, if possible, to cut them again before planting. If the long-leaved kinds be stuck in the earth immediately after being taken from the parent plant, the inner bark will become black in from fourteen days to four weeks, and the cutting will perish.

This phenomenon appears to be in close connexion with the form of the leaves of these plants, as those of the acacias have very small stomata. In their stead, on the under side of the leaves of the latter plants, are small dimples, lined with short hairs, which the diosmas already mentioned also possess. Now, as the crude nourishing matter is drawn up through the open wood in its existing state, and received by the cutting, while the spongioles of the roots only imbibe it in a very thin solution, it appears that the above-named plants, on account of the peculiar formation of their leaves, cannot elaborate in any great quantity this gross nourishing matter; and hence arise stagnation of the juices, and the before-mentioned appearances.* The good effect of leaving these cuttings lying, and thus interrupting the growing process, and preventing the superabundant rise of the crude nourishing matter, will be apparent; and this is the more probable, as it is usual, for the same reason, to put a piece of mould round the cut.

Cuttings of succulent or fleshy plants must also lie for a time before planting, and on no account in a moist atmosphere, that the surface of the cut may be sufficiently dried. They retain so many watery particles in their cellular tissue that, when this is neglected, the face of the cut soon rots. The species of the families Melocactus, Echinocactus, Mammillaria, Opuntia, Cereus, &c., have an extremely thick bark, and a firm epidermis with very few stomata; on which account the process of evaporation is so slow that they remain alive for a long time without receiving external nourishment. The dried cuttings of these plants, therefore, are generally planted in dry earth, and set in a bed or house filled with warm air, and are not watered till they have formed roots from the nourishing matter accumulated in themselves. The roots can scarcely ever penetrate the thick bark, and are produced between the wood and the bark. In some of the Opuntia and Cereus species, however, they come out of the bark at the side. The other succulent and fleshy plants which form side roots, such as the Aloe, Haworthia, Sempervivum, Mesembryanthemum, Crassula, Plumieria, and its congeners, as well as all the Cacti, may be watered as soon as they are planted. Lastly, plants with milky juice also require similar treatment, as they are equally liable to damp off.

As soon as a part of one of these plants is cut off, the milky juice exudes in great quantities, covers the whole surface of the cut, and hardens like caoutchouc, by which the vessels are all stopped up, and the ascension of the moisture prevented. Cuttings of Ficus, and the dry roots of Euphorbia, are put in water, where they remain twenty-four hours before they are put in the earth. The same end is also attained when they are put in dry sand immediately after being cut, and afterwards the sand and the milky juice cleared away. Only the succulent and very milky Euphorbias must lie for some time.

Although it is proved by the above that the cutting receives as much moisture through the face of the cut as it loses in ordinary circumstances by evaporation, yet no sooner is it placed in very dry air, or in a draught, or exposed to the sun's rays, than a disproportion takes place between them. When this is the case, more watery particles are lost through evaporation than are raised in the body of the wood, which is very easily perceived in fleshy-leaved plants. On this account, hot-beds and houses prepared on purpose for propagating should be used, in which the outer air can be excluded, a moist temperature maintained, and, in very warm sunshine, a dense shade can be given. Bell-glasses should be placed over the more difficult-rooting cuttings, to protect them from all external influences which might destroy them before the made roots. The most proper form of bell-glass is that which gradually tapers from the base to the top, as from glasses of this shape the moisture, which adheres to the inside in the form of drops, runs gradually off without the dropping so injurious to cuttings. This disadvantage is found in all other forms more or less, such as those that are round at the top, or cylindrical, with the top bluntly truncated; and also in beer-glasses, which are often applied to this purpose. The most unsuitable glasses, which are, however, much used, are those small at the base, and swelling out like a globe.

The enclosed air under the glasses will soon lose its oxygen, through the respiring process of the plants within, and also be vitiated by other exhalations; and, if it is not changed, it generates mould, and the cuttings lose their fresh appearance. For this reason, the glasses, if possible, should be daily ventilated and wiped; or, what is still better as it will entirely renew the air, dipped in a vessel of cold water, and well shaken, so that too many drops of water may not remain on the glass, although they are not so injurious to the cuttings. In an extensive establishment, this operation requires too much time, and therefore round holes, of about from half an inch to three-quarters of an inch in diameter, should be made at the top of the glasses; and these will prove very serviceable, if the pans stand on a warm platform in the houses or beds prepared for the purpose. In small gardens, where the cuttings are placed with other plants in the houses on the bed or shelf under the windows, glasses without holes would be preferable.

The cuttings themselves should not be stuck too close together, and all the leaves should be left on, which are essential for elaborating the absorbed and deposited nourishment; removing the lower leaves has a particularly bad effect on the rooting. There is an exception, however, in those which have small close-set leaves, such as the Ericas, &c.; which, when entirely surrounded with earth, soon begin to rot, and infect the branch, and therefore the leaves should be removed from the portion put into the earth. All decayed parts should be taken carefully off; and woolly-haired cuttings should not be sprinkled, for as the moisture adheres to them for a long time, they are very liable to rot.

With these, and in general all plants liable to decay, the bell is either placed within the edge of the pot, and the water poured between the two rims, by which sufficient moisture is communicated to the pot; or a small unglazed pot, without hole at the bottom, filled with sand or mould, is plunged to the rim in the middle of a larger pot; the cuttings are then stuck round the outer edge of this large pot, and the water is only poured in the smaller pot when as much moisture penetrates through the sides of the pot as the cuttings require.

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# PART II.

## LIST OF NEW AND RARE PLANTS.

Angræcum pellucidum. Transparent Angrec. (Bot. Reg. 2.) Orchidaceæ, Gynandria Monandria. A native of Sierra Leone, imported by Messrs. Loddiges's, with whom it has bloomed. The raceme of flowers is pendant, about six inches long. Each blossom is about three-quarters of an inch across, White.

Catleya pumila. Bordered dwarf Catleya. (Bot. Reg. 5.) Orchidaceæ. Gynandria Monandria. In Messrs. Loddiges's collection. A native of Brazil. Sepals and petals rosy-lilac; labellum same colour, with the lip stained with blood-red, having a small white margin. Each blossom is about four inches across.

Catleya marginata. White bordered. (Pax. Mag. Bot.) Orchidaceæ. Gynandria Monandria. Imported from Brazil by Messrs. Loddiges's, with whom it has recently bloomed. The flowers are very large compared with the size of the plant, and are borne singly on the top of the fresh pseudo-bulbs. Each blossom is four inches across. Sepals and petals rosy-lilac; lip stained with a deep blood-colour, having a very distinct white margin.

Clematis montana; variety Grandiflora. Mountain Virgin's Bower. (Bot. Mag.) A native of Northern India, where it was discovered by Dr. B. Hamilton, in the valley of Napal. Messrs. Veitch's have bloomed it in the open air in their nursery. The flowers are pure white, single; produced numerously; very fragrant. Each blossom is near four inches across. It strikes readily from cuttings, and deserves general cultivation; it blooms during a long period of the summer.

Convolvulus ocellatus. Purple-eyed Bindweed. (Bot. Mag. 4065.) Convolvulacæ, Pentandria Monogynia. From South Africa, and has bloomed in the greenhouse at the Earl of Derby's, Knowsley Park. The flowers are white, with a purple eye. Each blossom is about an inch across.

**Croci autumnales.** Autumnal Crocus. (Bot. Reg. 3.) Iridaceæ, Triandria Monogynia. Six autumnal Crocus's, which are in the collection of the Dean of Manchester. The blossoms are purple, lilac, and white.

**Euonymus Japonicus.** Japan Euonymus. (Bot. Reg. 6.) Celastraceæ Pent. Hexandria Monogynia. A native of Japan; grows a bush about six feet high. It is a hardy evergreen. The flowers are very small, of a greenish-white.

**Gomphrena pulchella.** Large-flowered globe Amaranth. (Bot. Mag. 4064). Received by Messrs. Veitch's, of Exeter, from Monte Video. The plant in all its parts much like the common Globe Everlasting. The heads of blossoms are larger, and of a brighter rosy hue. It has bloomed in the greenhouse at Messrs. Veitch's. It appears to be annual, and very likely to be an ornamental flower for the border during the summer.

**Lupinus arvensis.** Field Peruvian Lupine. (Bot. Reg. 1.) Leguminosæ. Diadelphia Decandria. A half-hardy biennial, growing from one to two feet high; flowering the greater part of summer and autumn. The flowers are produced in a raceme of about three inches long, purple and yellow.

**Triptilion spinosum.** Spring Triptilion. (Pax. Mag. Bot.) Compositæ. Syngenesia Æqualis. A native of Chili, seeds of which were sent to Mr. Frost, the skilful gardener at Dropmore, where the plant has bloomed. It is an herbaceous perennial. The flowers are produced very numerously in corymboas, heads about two inches across, of a most intense blue. It is a very interesting plant, well deserving a place wherever it can be grown. It can be increased by a division of the roots, being made in autumn early enough to strike before winter. It produces seed, though but sparingly; they must be sown as soon as ripe.

**Turrea lobata.** Lobed Turrea. (Bot. Reg. 4.) Meliaceæ. Monadelphia Decandria. A stove plant, from Sierra Leone. The appearance of the plant is much like that of an Althæa fratex. The flowers have the appearance of a small orange blossom, white, but not fragrant.

# PART III.

# MISCELLANEOUS INTELLIGENCE.

## QUERIES.

**On Lotus Jacobæus.**—You would greatly oblige a Subscriber of your Cabinet. If you would inform me what soil the "Lotus Jacobæus" will prosper best in a bed.

Cambridge, January 17. T. N. E.

[A rich light loam. We have grown it in such in beds for many years, and it blooms profusely. When in a strong clayey loam, it produces much more foliage, and less bloom. If a strong loam exists, mix with it one half leaf mould and sandy peat.—Conductor.]

**Moore's Victory Pelargonium.**—Lucy would be glad if some reader of the Cabinet would inform her where that beautiful variety of Pelargonium Moore's Victory, can be obtained. An early reply would be considered an additional favour.

Rochester.

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**On Elichrysum proliferum.**—I should be much obliged if any of your correspondents would inform me (through the medium of the Cabinet) the best method of propagating and cultivating the "Elichrysum proliferum." An early answer would much oblige A Three Years' Subscriber.

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*On blooming Seedling Pelargoniums.*—In a paper on the raising Geraniums from seed, by Mr. Cock, of Chiswick, in the January Number of the Cabinet for 1841, that gentleman says:—"If they do not show flower by the beginning of July, I plant them out on a south-aspected border, &c." Does Mr. Cock mean that they should be turned out of their pots and planted out, or plunged in their pots? An answer in an early Number will greatly oblige

A Constant Subscriber.

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On a list of Ericas.—A young gardener will be obliged by a list of twenty-four of the best kinds of Ericas.

Kent.

[Erica tricolor, E. Hartnelli, E. splendens, E. mundula, E. tenuiflora, E. campanulata, E. jasminiflora, E. conspicua, E. tumida, E. depressa, E. Cavendishii, E. perspicua, E. perspicuanana, E. sulphurea, E. aristata major, E. Beaumontiana, E. odorata, E. ventricosa superba, E. vestita coccinea superba, E. cerinthoides, E. metulæflora bicolor, E. Westphalingia, E. radiata, E. tricolor superba, E. ventricosa coccinea major, E. inflata rubra. These are the most beautiful we have seen at the London Horticultural Societies' exhibitions; the prices are from 1*s.* to 2*s.* 6*d.* each. The other plants our correspondent mentions are 1*s.* 6*d.* each; they succeed well in the situation he named. The list he asks for can be sent when address is supplied.—Conductor.]

Rot in Pansies.—During 1841 and 1842 a disease attacked my Pansies, and they rotted off close to the ground. The past season I adopted the following method, and with perfect success:—The first week in May I mixed a compost of equal portions of rich loam, fresh loam, and leaf mould, to which I added a moderate portion of sand, and about half a peck of lime, to a barrowful of compost; this I forked in two or three inches deep close to and around the plants, and they flourished admirably.

Clericus.

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Plants to grow in Ward's Cases.—Some remarks being made on Ward's Glass Cases for plants in the October number of the Cabinet, I am desirous of knowing what sort of plants flourish in such habitation, and if any peculiar mode of treatment is requisite.

A Learner.

[Nearly any kind of plant of the required size will succeed with good management, such as Camellias, Fuchsias, Azaleas, Chorozemas, Pelargoniums, Cactus's, Mimulus, any of the bulbous tribe, as Hyacinths, Crocuses, &c., Ferns, Jasminiums, Chinese Primroses, &c. A portion of air is admissable into the cases, and the usual attention to water, &c., is only requisite.—Conductor.]

On Dwarf early blooming Shrubby Plants.—On a sloping lawn which is in view from my sitting-room I have a border forty yards long planted with various kinds of shrubs, the lowest of which is half a yard high. In front I have a row of Crocuses in variety for spring bloom, but no shrubs to bloom then nor earlier than the Rhododendrons. I should be obliged by a list of a few dwarf shrubby early-blooming plants to make a row behind the Crocoses, and to grow about six inches to a foot high. A reply in the January Cabinet will be an additional favour.—Lucy.

Andromeda calyculata, white, March.
Ditto, with three varieties, white, March.
A. angustifolia, white,
A. dealbata, pink, April.
A. polifolia grandiflora, pink, April.
A. minima, pink, April.
A. olœfolia, pink. April.
A. revoluta, pink, April.
A. tetragona, white, April.

Rhodora Canadensis, rose, April.
Daphne Mezereum, rose, white and pink, by pinching the leading shoots, will bloom dwarf, March.
Daphne collina, purple, March.
Lauristinuses, kept dwarf by pinching leading shoots, and will bloom all winter.
Ulex, double furze, is easily kept prostrate, yellow, March.
Erica carnea, red, March.
Erica mediterranea, purple, April.
Erica minima, red, April.
Erica vulgaris, several varieties, as white, red, rose, purple, &c., April.
Lonicera, (Honeysuckle). There are several bloom in March and April, yellow, of shades, red and purple, all easily kept as dwarf bushes.
Ribes sanguineum, with several varieties, red, April.
Ribes aureum præcox, golden, April.
Both kinds are, by pruning, easily kept quite dwarf.
Azalea nitida, white, April.
Azalea pontica pallida, yellow, April.
Azalea pontica tricolor, red, April.
Pyrus floribundus, white, April; is easily kept dwarf.

## REMARKS.

On striking Cuttings in burnt clay.—Having been very successful in striking cuttings of nearly every kind of stove and greenhouse plants I have in my collection (which consists of most of the usual handsome flowering shrubby kinds) in burnt clay, I am induced to recommend the plan to others. Burnt clay has the property of absorbing ammonia from the atmosphere, which affords a constant and regular stimulus to the cuttings, and enables them to send out the radical fibres very quickly. G. S.

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On Tulips and Anemonies, &c.—I have been a subscriber to your very useful Cabinet from its first commencement, and assure you I always peruse its pages with great interest; but I am surprised that you should lend them for the insertion of so senseless a paragraph as appeared in the Number for December last, headed "On Tulips and Anemonies." The author, I see, subscribes himself a Southlander, and to judge from his taste and judgment in floriculture, I think he might have written Zealander; but come from where he may, he can never have seen a good tulip bed, where, as Mr. W. Harrison says in your last volume, page 80, "All other beauties hide their diminished heads." Or he may be like many more would-be florists, fancies those flowers that require the least attention. I doubt not but he has a good stock of single Anemonies, Hepaticas, Crocuses, Snowdrops, Aconites, &c., all certainly very pretty, and cheap, but to set them above the Tulip, the queen of florists' flowers, is past forgiveness.

Tell him, Mr. Editor, in your next, he ought to consider himself an outcast of florists, and that his natural death will never be regretted by them.

I am only a cottager. and my daily employment engages the principal of my time, yet I can find time and means to grow, besides Southlander's favourites, a few of my own, and can, at this dreary season of the year, walk round my tulip bed and mark every spot where my particular favourites lie hid, and with more pleasure, perhaps, than Southlander views his beautiful single Anemonies.

A Kentish Cottager.

Leonotis leonurus.—This is one of the finest greenhouse plants grown, and deserves to be in every one. I have had a plant in bloom the past summer for several months, which, with its noble spikes of splendid orange-scarlet flowers, formed a brilliant object. I had it in my collection since 1836, but with the usual treatment of greenhouse plants I could not bloom it. I resolved to adopt another method, and I therefore had a one year old plant shifted into a pot a foot in diameter, in a rich loamy soil, not sifted, well drained, I placed in a forcing pot heated by hot water, and having a brisk and moist temperature it grew rapidly; and having a free supply of water, absorbing much, it produced fifteen vigorous spikes of bloom, and when just expanding I had it removed to the greenhouse, where it continued to bloom till November. The plant can be procured at the nurseries for a trifling sum, and it deserves a place in every greenhouse collection.

Somerset. W. W. Hall.

Guano Manure.—That the manures in present use, and the slovenly and expensive modes of applying them, are inefficient for the purposes required, no person can doubt; and I trust the time is not far distant when every agriculturist will coincide with the opinion there expressed. If individuals would but discard from their minds all prejudice, all dread of innovations being made on the old system, and discontinue those practices which they have hitherto adhered to, merely because their forefathers did so, I feel confident one fair trial of guano, bone-dust, nitrate of soda, and many other substances, would convince even the most sceptical that it is to their interest to continue the use of them, and that their lands never previously produced such heavy crops. Numerous experiments have been made on the guano, and the details given in various provincial papers by gentlemen who have no motive in misstating facts, and the result in every case appears to have been satisfactory. I can corroborate those statements in all essential particulars, and assert that, as a general fertiliser, and in the growth of wheat, barley, oats, hops, turnips, wurzel, and on grass lands, guano will be found one of the most valuable manures of modern introduction. Several of my acquaintance have tried it in the cultivation of Pines, Melons, Cucumbers, &c., and many florists' flowers, and all concur in giving it the highest character. The quantity used for the latter purposes was about a quarter of a pint of manure to one barrowful of common garden soil, but probably these proportions may be improved upon. From the experiments made it would appear that two hundred weight of guano is sufficient for an acre of wheat, barley, or oats. I am myself going to use guano in the cultivation of Dahlias, Carnations, Pinks, and Pansies, and shall forward the result in due season. Guano is obtained from islands in the South Seas, where it forms a stratum many feet thick, it being the accumulation for ages of the excrement of innumerable sea-fowl. It is used as a manure with great advantage on the coast of Peru, where the soil is otherwise extremely sterile. Its composition is said to be—

| | |
|---|---|
| Earthy insoluble salts, principally phosphate of lime | 29 2 |
| Soluble salts, fixed alkaline sulphate, and chloride | 2 5 |
| Organic matter | 68 3 |
| | 100 |

The organic matter consists of—

| | |
|---|---|
| Lithic acid | 16 1 |
| Ammonia | 8 7 |
| Other organic matter | 43 5 |
| | 68 3 |

Experiments on various Flowering Plants, with Guano and Nitrate of Soda. By J. E. Teschemacher.—Small parcels of the new manure guano having been very generally circulated in this vicinity, it is right to put those in possession of it on their guard against using it too freely, many plants in England and some here having been killed for want of proper care in the application of it. Guano is an extremely powerful and warm manure, and if applied in large quantities, or in lumps, destroys the roots. For Pelargoniums, Roses, and all hardy, strong-growing plants, one teaspoonful to a quart of earth, or about 1 part in 100, is sufficient; it should be pulverised and well mixed with the earth in which a plant is to be repotted. When it is not convenient to repot, the earth may be gently stirred on the surface of the pot one or two inches deep, and the guano pulverised, then mix in; the plants should be kept well watered. Besides Pelargoniums and Roses, I have tried it on the Myrtaceous family, on Ericas, Fuchsias, and Camellias; its effects on these are equally surprising. I have been also trying experiments on various plants with nitrate of soda; in every case I placed two plants, of the same species and of nearly the same size, close together; one of them was watered three times a week with a very weak solution of this salt, the other was under the usual management. The effect of the nitrate of soda has now become very evident, the plants watered with it are larger and earlier in bloom than the others; it appears, however, to me, probable that these effects will be rather evanescent, and the plants will always require this stimulant. I observe in the English publications that this constant necessity for the stimulant is urged against all these new manures, but surely there is no strength in this argument. All manures become exhausted, and the farmer has always to apply the stimulant of his manure-heap to make his land bear. From some experiments I have made, I think that guano will prove a manure of much greater permanence than any that is now in use, particularly in soils deficient in phosphate of lime.—*Hovey's Magazine of Horticulture.*

On Yeast as a Manure.—Having seen the most surprising effects from refuse barm or yeast, diluted with water, and distributed over grass lands, I am induced to call the attention of some of your correspondents more particularly to its use, where it can be readily obtained, as it seems to be the most powerful manure we have for new grass lands, applied early in the spring; and for plants generally requiring a rich compost it is highly beneficial, given in a very diluted state. Composts for Roses, Geraniums, Dahlias, &c., are greatly improved by the addition of a small quantity of putrid yeast in a fluid state. It acts as a powerful exciter to the whole mass of vegetable matter; the results arising from the fermentation and decomposition of which, and their effects in stimulating vegetation, are well known. H. B.

On Tussilago fragrans.—I do not know any border plant that is a greater favourite with the ladies than the beautiful heliotrope scented flower of Tussilago fragrans, either growing in pots or as a cut-flower; and to insure a regular or ample supply of flowering plants, it is only requisite to prepare a steep bank facing the south, and sloping to an angle of about 45 degrees; about the middle of June fill it with plants six inches apart, and cover the surface of the bank with at least six inches of ordinary garden mould. No further attention is necessary till the end of October, when it will be observed that almost every flower has formed a bold swelling flower-bud, from which a sufficient supply either for the greenhouse or the market, may be potted off. By keeping part in a cold frame, a succession may be retarded, and thus a supply obtained till the end of March, when the season will furnish an ample stock of other flowering plants to take its place. The plantation made in June will continue to furnish plenty of flowering plants the second year after planting, but should be afterwards renewed, as the flowering plants become weaker and far fewer in number after the soil is exhausted by bearing a succession of the same sort of crop. A few leaves thrown over the bank will protect many of the flowers in ordinary winters, and retard their flowering till the beginning of spring.

Gesnera Zebrina.—In order to have the Gesnera Zebrina bloom in a dwarf state, the ends of lateral shoots being cut off as soon as they appear to have formed flower-buds, inserted in sandy loam, and placed in moist heat, soon strike root, and then bloom nearly as fine as if allowed to remain on the parent plant, but in a very dwarf and compact state. I have a number of such struck plants

**in fine bloom, which now make pretty dwarf ornaments in the greenhouse, and appear to be likely to do so for most part of the winter.**

**Newport place, Dec. 4, 1843. T. Sackett.**

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Growing Amaryllis Belladonna in Pots.—This is a plant of the easiest growth, generally blooming in September and October, and adding much at that season to the beauty of the greenhouse or parlour. The soil best suited to the bulb is composed of half sandy loam, quarter leaf-mould, and a quarter old hotbed manure, with sand in the proportion of nearly one-third of the whole. The bulbs should be potted in August or September, and those with flower-buds will soon throw up a spike of elegant flowers. Give good drainage, with broken potsherds, coarse at the bottom and finer above, and fill the pots with the compost; place in the bulb, setting it down so as to leave about one-third of the top above the surface; finish with a good watering through a fine rose, or with a syringe, and place the pots in a frame or in the greenhouse, where the bulbs will speedily take root, and produce their flowers. But it is after this that the bulbs require the most attention, to make them bloom well another year; for upon the growth of the leaves, and the great quantity of sap stored up in the bulb, depends entirely its future excellence. As soon as the flowers have faded, the stem may be cut off just above the bulb; good supplies of water should be administered, and leaves will begin to put forth; in the course of two or three months they will have acquired their full size, and watering should then be gradually diminished until the foliage is completely dried up. During their growth the plants should be placed in a sunny situation, and as near the glass as convenient. When the bulbs have completed their growth, which will probably be in the month of February or March, they should be placed away on a dry shelf, turning the pots upon their sides, but not shaking out the bulbs. Here they may remain until August or September, when the operation of repotting should commence again.—*Hovey's Magazine of Horticulture.*

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On Digging the Ground between Shrubs.—Having travelled to a considerable extent through the Midland Counties during the last two months, I was much pleased to observe that wherever it appeared to be practicable a shrubbery of some extent was an ornamental appendage to the dwelling-house. I was struck with the mode of management however, which in numerous instances prevailed, viz., digging to some depth around the shrubs, which in every case I saw produced an injurious effect on the shrubs, especially those planted nearest to view at the front of the borders; and most of such are the handsomest kinds; the fact was numerous specimens were so injured by it as to be stunted in growth and of a sickly appearance, I now allude to evergreen shrubs. It has been my practice for the last ten years to regularly spread over the surface of the border, to the extent of my best shrubs, all the leaves which drop from them, and at the end of November, if not earlier, just to cover them over with a sprinkling of fresh soil; this not only retains them where placed but they rot by the spring and form the most natural nutriment for the surface fibrous roots of the plants, and I have invariably found the plants to be much benefited by it, growing and blooming more vigorous; the surface of the border too is as neat as if dug, &c., according to the custom I deprecate, and the evil of cutting and lacerating the best (fibrous) roots is obviated.

I had not a shrubbery before I came to my present residence eleven years back; when I came here I found a shrub border of a hundred yards long forming a direct line on the east side of the front of my dwelling; being along the termination of that side of the grass lawn, it had been annually dug, and along the front, nearest the grass, a quantity of herbaceous perennial, biennial, and annual flowers had been grown, this did not accord with my taste, I therefore had the border raised with soil, and turf laid along the front of the border so that the lower branches of the shrubs lay upon the grass and the twigs formed the boundary line for future; the effect was much more natural and pleasing, and I formed my flower border in a situation in accordance with the nature of the plants.

Vicarage, Huntingdonshire. Clericus.

**New Chrysanthemums.**— The following description of the new French Chrysanthemums we noted down when the respective kinds bloomed this season All are pretty, and several of them particularly so.—Conductor.

Malvinia, flowers double, deep pink, petals broad.

David, flowers double, in fine clusters, yellow.

Itobate, flowers double, pretty pink, with a light centre.

Solon, flowers double, yellow.

Princess Morea, flowers double, lilac-purple, with a light centre.

Coccinea, flowers double, Ranunculus form, reddish scarlet upper side of petals, lower buff colour.

Flecheir, flowers double, pink, petals broad.

Julius Cæsar, red, with a yellow centre.

Isoler, flowers double, purple

Phidius, flowers double, Ranunculus form, rosy-salmon.

Duchess de Montebelle, flowers double, in fine clusters, blush, petals broad.

Bella Donna, flowers double, with a centre nearly white.

Abelard, blush, quilled, pretty.

De Crequi, flowers in fine clusters, lilac, petals broad.

Sappho, orange red, petals broad.

Louis Philippe, flowers very double, centre blush, the other portion a pretty purple.

Irene, flowers double, in fine clusters, yellow.

Leontine, light red.

Compte d'Eu, semi-double, flowers in clusters, rosy red.

Incomparable, flowers double, centre buff, the other portion red, petals broad.

Imogine, flowers semi-double, buff, with a pink tinge.

Bejoin, flowers semi-double, blush, petals broad.

General Labourg, flowers double, deep blush, petals broad.

Aristides, outer petals red, centre ones orange, flower double.

Dr. Petit, lilac, semi-double.

Horatia, lilac purple, petals broad, double.

Duc d'Albuffre, buff, outer petals reflex.

Lamarque, golden yellow.

Marshal South, bright yellow, very neat.

Horace, purple, broad petals.

Timeon, yellow.

Georgiana, blush.

Redonnel, red, semi-double.

Moreau, dull red.

Cora, blush, broad petals.

Christopher Columbus, blush, broad petals, double.

Aimie Jean, dull red.

Bethulea, lilac-purple, petals broad, flower large.

Demosthenes, flower double, the centre of it yellow, the ends of the petals red.

## FLORICULTURAL CALENDAR FOR FEBRUARY.

Greenhouse.—This department should have good attendance during this month.

The herbaceous kinds of plants will require occasional waterings, but less frequent and in less quantities than the woody kinds. Succulents, as Aloes, Sedums, &c., should be watered very sparingly, and only when the soil is very dry. When water is given it should be as much as will moisten ALL the soil, where water is only given to moisten the soil an inch or two at the top and the other kept quite dry, the result is generally certain, namely, the death of the plant. The plan to be attended to is, water only when necessary, but a full supply when it is done. Air should be admitted at all times when the weather is favourable, or the plants cannot be kept in a healthy state. When the weather is *damp*, foggy, *&c.*, do not give air then, let a *dry* air only be admitted. If any of the oranges, lemons, &c., have naked or irregular heads, towards the end of the month, if fine mild weather occur, begin to reclaim them to some uniformity, by shortening the branches and head shoots; by this attention they will break out new shoots upon the old wood, and form a regular head; be repotted in rich compost in April, reducing the old ball of earth carefully, and replacing with new soil. After shifting, it would be of great use to the plants if the convenience of a glass case could be had in which to make a dung-bed that the pots might be plunged in; this would cause the plants to shoot vigorously, both at the roots and tops. Repot Amaryllis, &c. Tender and small kinds of plants should frequently be examined to have the surface of soil loosened, decayed leaves taken away; or if a portion of a branch be decaying, cut it off immediately, or the injury may extend to the entire plant and destroy it. Gloxinias &c. now beginning to push, should be potted.

Auriculas should, at the end of the month, be top-dressed, taking off old soil an inch deep, and replacing it with new; give air freely when dry weather.

Bulbs, as Hyacinths, &c., grown in water-glasses, require to be placed in an airy and light situation when coming into bloom. The water will require to be changed every three or four days. The flower-stem may be supported by splitting a stick at the bottom into four portions, so as it will fit tight round the edge of the glass at the top. Beds of Hyacinths will require attention if severe weather occurs, also beds of Tulips, &c.

The seed of Calceolarias should be sown at the end of the month, and be placed in a hot-bed frame, also cuttings or slips be struck, as they take root freely now.

Cuttings of Salvias, Fuchsias, Heliotropes, Geraniums, &c., desired for planting out in borders or beds during spring and summer, should be struck in moist heat at the end of the month, in order to get the plants tolerably strong by May, the season of planting out.

Dahlias.—Dahlia roots, where great increase is desired, should now be potted or partly plunged into a little old tan in the stove, or a frame, to forward them for planting out in May. As shoots push, take them off when four or five inches long, and strike them in moist heat. Seed should be sown either in pots or upon a hot-bed. Pots or boxes with seed placed in a warm room near light, and admitting plenty of air to the plants when up, will succeed well.

Ranunculuses and Anemones should be planted by the end of the month.

Herbaceous Perennials, Biennials, &c., may be divided about the end of the month, and planted out where required.

Hydrangeas.—Cuttings of the end of the last year's wood, that possess plump buds at their ends, should now be struck in moist heat; plant one cutting in a small pot (60's). When struck root, and the pot is full of roots, repot them into larger; such plants make singularly fine objects during summer.

Mignionette, to bloom early in boxes or pots, or to turn out in the open borders, should now be sown.

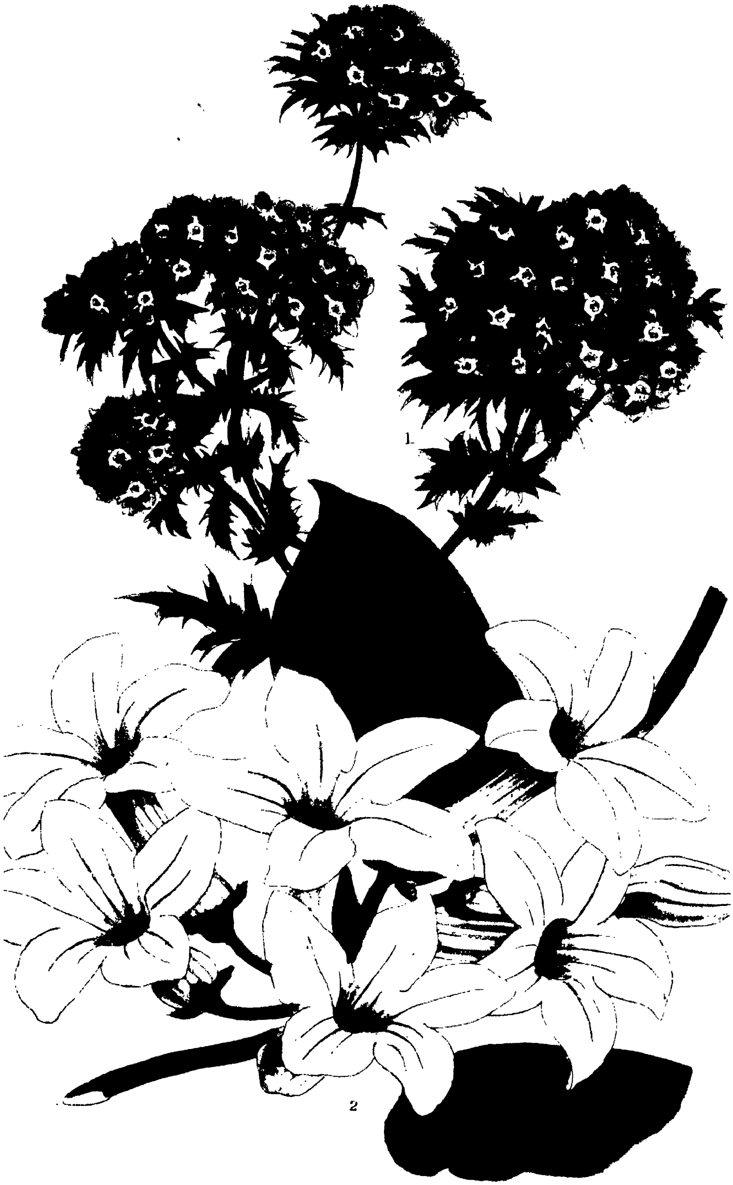
Rose Trees, Lilacs, Pinks, Hyacinths, Polyanthuses, Narcissus, Honeysuckles, Persian Lilacs, Primroses, Rhodoras, Persian Iris's, Sweet Violets, Cinerarias, Hepaticas, Aconites, Jasmines, Azaleas, Lily of the Valley, *&c.*, should regularly be brought in for forcing.

Tender Annuals.—Some of the kinds, as Cockscombs, Amaranthuses, &c., for adorning the greenhouse in summer, should be sown by the end of the month.

Ten-week Stocks, Russian and Prussian Stocks, &c., to bloom early, should be sown at the end of the month in pots, placed in a hot-bed frame, or be sown upon a slight hot-bed, also some other of the tender kinds to prepare them strong for early summer blooming.

Protect the stems of tender plants with furze branches, &c. The stems of tender climbing Roses are screened by such precaution.

Chrysanthemums, the heads of decayed flowers, should be dried, and saved for the seed which probably they possess, and be sown in spring and raised in a hot-bed frame. The old plants must be kept in a cool frame, free from frost, but admit air to prevent them drawing up.



1. Triptilion spinosum. 2. Stephanotis floribunda.

THE
FLORICULTURAL CABINET,
MARCH 1st, 1844.

# PART I.

## EMBELLISHMENTS.

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### ARTICLE I.

### TRIPTILION SPINOSUM. SPINY TRIPTILION.

Compositæ. Syngenesia Æqualis.

In our volume for 1841, at page 114, we remarked upon this very neat and pretty flowering plant, a figure of it was then given in the Botanical Register; in the accompanying observations, Dr. Lindley states, " It is a most beautiful flowering herbaceous plant, a native of Chili, where it is called Semperviva, on account of the permanence of its deep azure blossoms." The plant is an herbaceous perennial, increased by division of the roots or by seeds; the latter are sparingly produced and should be sown as soon as gathered, and be placed in a forcing house till the plants are up, and then be potted singly in small pots, in a compost of peat, leaf-mould, and turfy loam, in equal parts, having the pots with a free drainage, as it is very susceptible of injury from wet, and in consequence requires particular attention in winter. Plants can now be obtained at the principal Nurseries, and it certainly deserves to be grown in every greenhouse or in every flower-garden during summer. It can be induced to grow nearly prostrate, or tied up to rise near two feet high. We saw it in profuse bloom, and it was certainly strikingly beautiful.

### STEPHANOTUS FLORIBUNDUS. Copious Flowered.

Asclepiadeæ. Pentandria Digynia.

This very beautiful and noble-looking plant, we have several times remarked upon in former volumes, as one of the most graceful and handsome climbing plants that has been introduced into this country. It is a native of Madagascar, from whence it was imported by Mrs. Lawrence, of Ealing Park, in whose splendid collection of stove-plants we have several times seen it in bloom. The same specimen has been exhibited at the London Horticultural Society's shows in the Chiswick Gardens; it is trained to a circular wire trellis about two feet and a half in diameter and nine feet high, densely covered with a noble rich green foliage and quite loaded with a profusion of its fine clusters of lovely fragrant pearl white flowers.

The plant is of easy culture, grows rapidly, and flowers the greater part of summer, and deserves to be in every collection. It may be procured at a very reasonable rate at the public Nurseries.

## ARTICLE II.

### REMARKS ON THE PINK.

BY MR. THOMAS IBBETT, FLORIST, BULL FIELDS, WOOLWICH, IN KENT.

On perusal of the last December Number of your valuable work, the Floricultural Cabinet, I noticed an article on the above subject, written by a person who styled himself "Florista," of a "Midland County;" I should have felt great pleasure if he had signed his name to it. The writer, in the first place, states, that several Articles have already appeared in your Cabinet, on the cultivation of the Pink, which I grant is very correct, having myself written three upon that beautiful plant, but never (I beg to observe) without always signing my name and address; to afford any person who might feel disposed an opportunity of correcting or answering any observation which I may have made in those Articles. "Florista" next says, "It is generally understood that northern and southern Florists are at issue on the properties requisite to constitute a first-rate variety of this particular class of Florists' flowers;" here I wish to state I differ very much from the writer, having for many years past had the pleasure of supplying the above-named plant in several northern districts, viz., Yorkshire, Newcastle-on-Tyne, Felton, Percy-main, and various other places in the north, where I have invariably found the opinion to be in perfect accordance with those of the south; but, if I may be allowed to conjecture, perhaps "Florista" alludes to Lancashire, if so, I have no hesitation in saying that I have never seen a good Pink that was raised in that county, nor can I find any other grower in this neighbourhood that has. Two years ago I received an order from a gentleman in Northumberland, and he acquainted me he had several pairs of Pinks from Lancashire, but they all turned out good for nothing; and it also appears to me, the florists of that county themselves do not agree together, for I have had several orders from them, and from one person in particular for the last three years, which I submit if they had not been approved of, I should not have been applied to for the third time. The writer further says, in his opinion "Norman's Henry is nothing more than a confused mass of petals, void of form, or of any other good quality;" here I again beg totally to disagree with him, it being, in the opinion of myself as well as most principal florists, a very fine flower, and which I shall never be afraid to recommend. "Florista" next alludes to "Garrett's Alpha," which not having grown enough of, I will not venture to speak of its merits or its demerits; next season I shall have more of it, when I shall be better able to judge of its qualities. The writer then attacks "Unworth's Omega," which, I beg to observe, with all its defects, I shall never discard from my collection. In the next place, in regard to the standard which your correspondent quotes, I can only say, I never have, or ever will, presume to have the ambition to lay down what in all respects is to constitute a good flower. In reply to "Florista," who wishes myself or Mr. Norman to favour him with a descriptive list of Pinks, possessing the requisite qualities to reach what he considers the standard of perfection, I will thank him to refer to the number of the FLORICULTURAL CABINET for July last, (page 158,) where he will find I have attempted to offer the best criterion that perhaps can be formed. For my own part I have given over showing, owing to my advanced period of life, but still cultivate nearly every sort worth growing; I grow for showers, and the Pink being so special a favourite with me, the attachment will induce me continually to add to my store.

I shall most gladly, at any future time, contribute any information which I deem conducive to promote the culture of this charming flower, alike neat, beauteous, and fragrant.

# ARTICLE III.

## ON THE CINERARIA,

BY A SUBSCRIBER IN DEVONSHIRE.

Not having seen in the two last volumes of your very interesting work, the Floricultural Cabinet, (which I have had the pleasure of being a subscriber for the past two years,) any precise culture of the Cineraria, which I am particularly fond of, and as you solicit communications from floral correspondents, I send you, if you think it worth insertion, the method I have successfully adopted;—and first, from seed.

I sow the seed, if it ripens pretty early as soon as it is ripe, in a thirty-sized pot, and plunge the pot in a little heat; the seeds will soon be up. I am not particular about the mould I sow in, provided it be fine and light. I sow the seed on the surface, and then stir the mould a little with a sharp pointed stick and smooth it over. As soon as the plants get two pairs of leaves I put them in a sixty-sized pot singly, using loam one-fourth, leaf-mould one-fourth, peat one-fourth, and sand one-fourth, mixing it well together, but it should be sifted fine before mixing. For the first potting I add a little charcoal broken about the size of peas. I then put them in a gentle heat again, plunging the pots in rotted tan, and water as required. As soon as they fill the pots with roots I re-pot them in forty-eights, using the same kind of soil, and re-plunge them in heat as before. As soon as they fill the pots again I re-pot them, using chopped compost instead of sifted, and put them in the greenhouse, where I have a heat of between fifty and sixty degrees, and re-pot as required. I would most strongly recommend the use of Hunt's patent pots for Cinerarias, for being fond of water you can give it more freely, for the roots, if it reaches the bottom of the pots, do not get soaked with water, the drainage preventing an overplus. I water with Guano water twice a week, and I have now very fine strong plants, short, thick of leaves, and they very vigorous, measuring seven and eight inches across, and the same in length, looking remarkably healthy, and now coming into profuse flower, and which I will forward to the Conductor (the flowers) for inspection if I think them worth it.

### *Treatment of One Year or more Old Plants.*

As soon as the plants have done blooming I cut them down close to the bottom and plunge them in heat without shifting. When I can get any offsets rooted I treat them in all respects similar to seedlings. I have a plant of C. Ovid, very strong, which I thought when I obtained it would have died, being so weak and small, but now is a fine strong healthy plant, very thick of bloom, with fine large and thick foliage. If any insects infest the plants, I fumigate with tobacco, lighting it with a candle instead of coals or cinders, for the gas of coals is disagreeable, and coals are more dirty and troublesome.

If these remarks are worth insertion in the CABINET, I shall feel highly gratified to aid the culture of flowers in any degree, and will forward to you the method I use with an Arnott stove for heating with less trouble than what I have before read in the FLORICULTURAL CABINET, and where I can keep up any desired heat required with perfect success.

[We shall be glad to receive the specimens, as well as the remarks on the stove.—CONDUCTOR.]

## ARTICLE IV.

### REMARKS ON DIGGING ESTABLISHED SHRUBBERIES,

BY A SUBSCRIBER, OF GRIMSBY.

IN perusing the pages of your CABINET, I consulted a gentleman on the advantages or disadvantages of digging amongst shrubs, whose opinion is, that digging amongst shrubs has a tendency rather to do harm than good; so it has if not done by those who thoroughly understand it, such as bankers and ploughmen, but observation and long experience has shown me, that if performed by people who know what they are doing their growth is much accelerated rather than retarded.

In 1841 I took up a great many shrubs in the autumn which had been planted five years but had made no progress at all, but quite stunted in their growth, owing to the hardness of the soil on which they were standing; during that time they had only been once dug amongst, but great pains had always been taken to eradicate all the weeds as they made their appearance. The land was trenched and all the shrubs immediately replanted, and to the great surprise of all who saw them, they made more wood the following summer than they had done for three preceding summers, and are in a most flourishing state up to the present time.

[The shrubs our correspondent refers to required the treatment applied, and after the plan had been properly pursued it would have been surprising if they had not flourished as stated. But this operation does not at all affect the opinion of our former correspondent as given in our January Number.—CONDUCTOR.]

## ARTICLE V.

### ON THE CULTURE OF THE INTERMEDIATE STOCK,

BY A KENTISH MAN.

HAVING been a reader of the CABINET for some time, and not seeing much said about the culture of Stocks, I take the liberty to send for insertion in the CABINET the following mode of treatment which I grow mine with, and I never fail to have an extraordinary fine bloom.

In the first week of July, I sow my seed in a bed of rich light earth in a situation screened from the mid-day sun, where I allow them to grow until the begining of September, when I put them into sixty-sized pots separately; the soil that I use is a light sandy loam. In these pots they stand until the middle of October, when I re-pot them into forty-eight sized pots in the same kind of soil as before; I then place them in a cool frame or pit, where they stand all the winter. I take care to give all the air possible, in order to keep the plants dwarf, and I uniformly dress the plants from all dead leaves, as this is a very essential thing in winter, and I never give more water than is really necessary to keep the plants alive, for if kept too wet they are very likely to damp off. About the middle of March they begin to show their blooming spikes. As soon as I can discern the single ones from the double, I separate them, and plant the single for seed in the kitchen-garden, so that I do not have any single ones in my beds or flower borders. Those plants I require for specimens, I re-pot into twenty-fours and place them in the frame, again shading them from the mid-day sun, giving plenty of air and water, as they like to be kept moist at this season. I let them stand in the frame until April, when I plant my bed with those grown in forty-eights, about a foot apart, and in May I have my beds in one sheet of most vigorous scarlet bloom, and which at that early season very greatly adds to the beauty of the lawn; and those, too, growing in twenty-fours, are then in such complete profusion of bloom as amply to repay for the trouble of extra potting.

# ARTICLE VI.

## DIRECTIONS FOR GROWING LISIANTHUS RUSSELLIANUS,

BY MR. JAMES CUTHILL, FLORIST AND EARLY FORCER, DENMARK HILL, CAMBERWELL, LONDON.

THE best time to sow the seed of this most splendid plant, Lisianthus Russellianus, is in March; and as the seed is amongst the smallest of nature's productions, it requires additional care in sowing; therefore to sow it in the usual way, upon a loose soil, the first watering carries the seed along with it, and hence the failure.

Prepare the following compost—half loam, the other made up with leaf, peat, or bog mould, with a little sand, place plenty of drainings in the bottom of a forty-eight or thirty-two pot, fill it with the compost very tight, and on the top place half an inch of sand, damp the sand with water to harden the surface, sow the seed, and sprinkle a very little dry sand on the top, place a propagating glass over the pot, or a piece of glass will do, place your pot into a heat of seventy or eighty degrees with a pan under it, for the future watering, at no time water on the top, the pan ought never to be allowed to get dry. The seedlings will appear in three weeks or more, then about three weeks up, plant them singly in a sixty-size pot in the above compost, with plenty of drainings in the bottom. Place them again in the back of your cucumber pit or frame, after this you cannot give them too much water, over head, and in the pans; and by the autumn, if they have been kept in a good growing heat, they will be fine little bushy plants; top them at every joint; in September shift them into large sixties, merely to keep their roots in a more intermediate state for the winter, after this all top watering must cease, and a pan placed under each pot to receive the watering; and as the winter approaches not a drop of water must be allowed to fall on the plant. The drier the top mould next the leaves and stem get, the more certain of preserving your plant. The best place I have found is a one-light pit, heated with a lining of dung from fifty to sixty degrees, air given front and back, that no damp can fix on the bars and drop on the plants; the second best place is the coldest part of the stove very near the glass; I have also kept them well in the warmest part of the greenhouse; in all cases just water sufficient to keep the plants from flagging. If the winter is dry, water once a fortnight, if damp weather once a month or so; towards the end of February place them in a cucumber pit or frame, in a heat of from seventy to seventy-five degrees, and when they begin a fresh growth shift them into as large pots as convenient, remembering the larger the pot, the finer your specimen; my largest plant had 600 blossoms on it, and was grown in a number eight sized pot. As the spring advances, it is almost impossible to give them too much heat and moisture, they are very fond of liquid manure.

It is useless to grow a fine plant in any place approaching to dry heat, nor less than seventy to eighty degrees. I have grown them five inches in seven days.

In removing out of the pits, great care must be taken, in not allowing the sun to shine on them for some days, as the change from a damp close heat to a dry house will be too much for them. By the above treatment, they will come into flower about the middle of July, and keep blooming from two to three months, forming a most splendid ornament for drawing-room, conservatory, or greenhouse.

[We have visited Mr. Cuthill's garden in order to see his plants, and they were of the finest description. He deserves encouragement in the sale of his seeds and plants for his attention to promote the successful growth of this beautiful plant, and for his liberality in making it public.--CONDUCTOR.]

## ARTICLE VII.

### POETICAL ALLEGORY, ILLUSTRATIVE OF THE VARIATIONS OF THE ROSE,

BY A DUBLIN YOUTH.

" My beloved is white and ruddy."—CANTICLES.

WELL pleased to see the Rose's bloom,
The muse demanded why
Should some the lily white assume
And some the crimson dye.

The cause was sought, but all assays
Were vain to this intent,
Till fancy, wrapt in ancient days,
Pourtrayed the strange event.

Near where the tree of knowledge grew,
In Eden's hallowed ground,
A bed of Roses struck the view,
And fenced the tree around.

Large sweets diffusing thro' the vale,
Their snowy bosoms spread
Their milk white blossoms to the gale,
Nor yet assum'd the red.

While Adam strung the manly nerve,
To dress and keep the ground,
His bride, well pleas'd her lord to serve,
Would range the garden round.

To cull the fruits and keep the flowers,
And mark the early bloom,
Each morn with Roses deck'd her bower,
Which breath'd a rich perfume.

This favourite spot she oft survey'd
With an attentive eye,
And there her constant visit paid,
To reap a fresh supply.

One morn, a fatal morn it was,
She paid her usual suit,
But ah! from hence destruction rose,
And bitter was the fruit.

Urged on by Satan's base pretence,
The first and worst of foes,
She dared to break the feeble fence,
And trample on the Rose.

Unaw'd she stretch'd the impious hand,
The alluring sweets to prove,
Regardless of her lord's command,
Regardless of his love.

The injur'd Rose beheld the theft,
And, blushing, chang'd to red,
The snowy hue its bosom left,
And wounded hung its head.

Its foliage wept a dewy shower
Which spoke some sad event,
Eve turn'd, and saw the bleeding flower,
And marvell'd what it meant.

Awhile she stood and gazed thereon,
Till trembling she withdrew,
Unconscious that she trampled on
The fairest flower that grew.

Here fancy paus'd, and truth began
The wonder to disclose,
A nobler form than flower or man,
Was crush'd beneath the Rose.

That only trodden to the ground,
Dishonour'd blushes red,
'Twas "Sharon's Rose" that felt the wound,
'Twas "Sharon's Rose" that bled.

The atrocious deed no sooner done,
Than Christ the victim stood;
In spotless white his godhead shone,
His manhood bath'd in blood.

And hence the Roses now unite
To exhibit Him that bled,
This wears the justifying white,
And that the atoning red.

The muse upon these graces gazed,
And brighter beauties eyed,
Till lost in wonder, love, and praise,
She kiss'd the Rose and died.

May'st thou, my soul, these blessings share
At the decisive hour,
And ever in my bosom wear
This sweet, this lovely flower.

# ARTICLE VIII.

## REMARKS ON GREENHOUSES, &c.

BY AN AMATEUR.

The number of greenhouses that are everywhere seen around our large towns, in what are termed suburban residences, indicates the increased taste for plants; and every person who has attended the exhibition of flowers of late years, must be impressed with the truth of this observation. But with all this anxiety, much remains to be done before anything like general satisfaction can be expected. Many greenhouses are not only badly constructed, but the plants themselves injudiciously chosen; and this is the more to be regretted, as both new and old varieties may be so easily purchased. It is my intention, as opportunities occur, to offer various suggestions upon these points. At this time particularly, with reference to the present season, nothing tends more to the injury of the ordinary plants in private greenhouses than too much care; it induces them to grow and become weak before the flowering season arrives, when disappointment is the consequence. Many plants should have matured their growth during the summer and autumn months; and it is very unnatural to induce them to grow or flower during cold, damp days. What they require is plenty of air, when the weather is fine, and when wet and cloudy a little fire heat to dispel the damp. If the frost, however, should be intense, it will be, of course, necessary to have stronger fires; but the thermometer should not rise higher than 40 degrees. Water should be sparingly given, and of the same temperature as the house. I have annexed a list of plants for which this treatment is indispensable.

Acacia alata, armata, juniperina, diffusa, saligna, striata, laxifolia, affinis, vestita, suaveolens, verticillata, rutefolia, and pulchella. Callistachys lanceolata, and ovata. Brachysema latifolia. Chorizema Henchmannii. Virgilia aurea. Dillwynia juniperina. Eutaxia myrtifolia, and pungens. Pultenæa daphnoides, and stricta. Corræa speciosa, pulchella, and virens. Pimelea diosmæfolia, and decussata. Loddigesia oxalidifolia. Templetonia glauca. Hovea celsi, and elliptica. Goodia pubescens, and latifolia. Grevillea acanthifolia, juniperina, rosmarinifolia, and sericea. Bauera rubicefolia. Hibbertia Cunninghamii. Kennedia monophylla, rubicunda, and Comptoniana. Plumbago capensis. Spigelia Marylandica. Serissa fœtida. Gnidia simplex. Lachnæa purpurea. Polygala myrtifolia, grandiflora, cordifolia, and speciosa. Maurittia heisteria. Epacris grandiflora, purpurescens, pulchella, impressa, campanulata, variabilis, and nivalis. Stenanthera pinifolia. Azalea indica phœnicea, albida. Diosma oppositifolia, capitata, ciliata, and ambigua. Boronia alata, serulata, and crenulata. Burtonia conferta. Sutherlandia frutescens, Swainsonia coronillifolia. Sottia dentata.

But where sufficient convenience is possessed, some greenhouses need not be destitute of flowers, even at this ungenial season of the year. Geraniums may be grown during the summer months for the express purpose—their early buds should then be removed, which makes them strong; and, if placed near the glass, will be in flower at the present time, as well as different species of Salvias, Primulas, Ericas, Verbenas, Camellias, and Roses. These, with others equally adapted, are desirable, when bulbs are not sufficiently advanced, and which, if prematurely forced, would bloom imperfectly.

## ARTICLE IX.

### REMARKS ON PEAT AND LOAMY SOILS.

It is now the opinion of some of our finest florists that a really sound loam, of velvety softness, composed chiefly of extremely fine dun-coloured silex, alumine, pale oxide of iron, and about six per cent. of chalk, all blended in such proportions by nature as perfectly to balance each other, is the staple earth of floriculture; we may add that a handful of such a loam, if taken up and pressed strongly together, will break and separate entirely on falling to the ground; any strong-rooting vegetable, stove-plant, pineapple, melon, or flower shrub, that does not require moor-soil, will flourish in it and be in health; but that if the loam be defective, it is far more safe to employ two or three-year-old leaf-soil; with a good quantity of pit-sand, and occasionally some heath-mould, making up by pressure of the hand what the soil wants in solidity. In this soil all the Gloxinias, the Pelargonia, Calceolarias, Fuchsias, and many other plants, will grow freely with deep verdure of foliage; but it must never be permitted to become quite heart-dry and parched. I may add, also, that the Thunbergias will prosper in it, though not to such an extent of broad, deep foliage, as in true peat. The mention of this word demands immediate explanation. Peat is now in the mouth of every one, as "bog-earth" was thirty years ago, and it occurs in all the pages of floriculture; but in no one instance is it correctly used, nor do the parties employing the term intend what they express. Peat is a short, easy word, and being used conventionally, passes for the heath-soil, or moor-earth, of Bagshot Heath, Sydenham Common, or Hampstead Heath,—the top spit, in a word, of a heath-common, which consists almost entirely of white, silicious sand, say 90 per cent., with some black vegetable remains of heath or short grass, and decayed twigs; the Prussian tests (ferro-cyanurets of potassa and soda) detect in it also a trace of iron. But peat, true peat of the turbary or peat-bog, is a very compound substance, more approaching to a sodden marl than anything else. It was thus described by Davy:—"The earthy matter of peats is uniformly analogous to that of the stratum on which they repose; the plants which have formed them must have derived the earths that they contain from this stratum. Thus, in Wiltshire and Berkshire, where the stratum below the peat is chalk, calcareous earth abounds in the ashes, and very little alumina and silica. They likewise contain much oxide of iron and gypsum, both of which may be derived from the decomposition of the pyrites (sulphur and iron) so abundant in chalk. Different specimens of peat that I have burnt, from the granite and schistose soils of different parts of these islands, have always given ashes principally silicious and aluminous," &c.

A specimen of very old Berkshire peat, exposed twenty years to the air, was of close texture and grey-black; not a particle of sand could be seen in it. When broken and comminuted, Thunbergia alata throve in it with a luxuriance that nothing could surpass. But peats are not to be trusted; therefore we must apply to leaf-mould and heathsoil, to bind which a tenth or less portion of finely-powdered pipe-clay (which consists of pure alumina and some silex extremely fine, if we mistake not) might be blended with safety and effect.

Of leaf-mould, one of the best adjuncts to the potting department, a good deal ought to be said and understood. Were it possible, we would always reject beech-leaves and laurel; the former, because they contain much chalk, and the latter because they decompose unkindly. But when we talk of leaf-mould, we infer the gradual decay of a wood pile, where all the twigs, amputated boughs, and clearings of the park and shrubbery, are collected. Thus we obtain the decomposed bark as well as leaves, and in the course of three or four years procure ample store of vegetable earth, in three stages of laboration. The first, and oldest, an unctuous substance, like old peat, rather brown, the very representative of humus, just fit to go into the earth. The second, screenings of the mass, abounding with much of the same soil, with a considerable portion of half-reduced twigs and stalks. This should stand the seasons of another year. The third, a quantity of the latter substances, and but little reduced vegetable earth. Leaves alone do not produce, by decay, a mould so valuable, nor yet so tractable, as does the wood-pile; therefore we recommend the latter. The quite reduced three-year-old mass incorporated with two-thirds of silver sand, forms an excellent substitute for heath-mould.

## ARTICLE X.

### ON THE BLUE-FLOWERED HYDRANGEA.

BY MR. R. SHERWOOD, OF DARLEY COTTAGE, IN THE POTTERIES.

NOTICING the different matters mentioned in the CABINET that have been employed, some with varying success and others failing entirely, to cause the Hydrangea to have blue flowers, I forward the method I adopted most successfully. The fine effects of charcoal as applied to pot plants under the management of Mr. Barnes, gardener to Lady Rolle, at Bicton, in Devonshire, coming under my notice there early last spring, I was advised to try its effects on the Hydrangea, with a view to increase the size of its floral heads. I did so in the following manner:—My compost consisted of one-half chopped turfy loam, and the other equal portions of fibrous peat soil, and small bits of charcoal. In potting I had a free drainage made of the roughest pieces of turfy peat and charcoal about four inches deep; having shook off nearly all the old soil, I repotted, in a careful manner, with the above compost. The plants grew very vigorous, producing very superior heads of bloom; but what proved the most gratifying was, the blossoms were of a beautiful vivid blue.

# PART II.

## LIST OF NEW AND RARE PLANTS.

**ANIA BICORNIS.** Two-horned. (Bot. Reg. 8.) Orchidaceæ, Gynandria Monandria. Sent from Ceylon to the Rev. J. Clowes, of Broughton Hall, near Manchester. It is of the Bletia type. The flowers are produced in a scape of about eighteen or twenty in each. Labellum yellow, with a few red spots; sepals and petals green. Each blossom is about an inch across.

**CEREUS EXTENSUS.** Long-stemmed. (Bot. Mag. 4066.) Cacteæ. Icosandria Monogynia. From Trinidad to Kew Gardens, where it has long been grown, but never bloomed till 1843. It is a creeping species. The flowers are of the size of the night-blooming Cereus, from eight to ten inches across. Tube green, scales greenish-yellow, tipped and edged with red, petals rosy-coloured.

**CRINUM VARIABILE, VAR. ROSEUM.** Rose-coloured Crinum. (Bot. Reg. 9.) Amaryllidaceæ, Hexandria Monogynia; Synonyms Amaryllis variabilis, Amaryllis revoluta. The C. variabile is the hardiest known species out of doors; it preserves its leaves in winter longer than C. capense, and shoots earlier in the spring. The flowers are inside white, tinged towards the mouth with rose, outside a beautiful rose-colour. Each flower is about five inches long, and as much across the mouth. It bloomed in April, 1843, in the collection of J. H. Slater, Esq., of Newick Park, in Sussex.

**DINEMA POLYBULBON.** Many-bulbed. (Bot. Mag. 4067.) Orchidaceæ, Gynandria Monandria; Synonym Epidendrum polybulbon. A native of Jamaica, Mexico, &c. It is a diminutive plant, rising about three inches high. Each flower is about an inch across, labellum white, sepals and petals narrow, greenish-yellow. Bloomed in the Glasgow Botanic Garden.

**DILLWYNIA CLAVATA.** Club-shaped. (Pax. Mag. Bot.) Leguminosæ, Decandria Monogynia. A native of the Swan River colony. It is a pretty greenhouse evergreen shrub. The flowers are produced in clustered spikes towards the ends of the branches. Each blossom is about half an inch across; the vexillum of a rich deep yellow, streaked with red; the keel and wings of a lively crimson. Its beautiful pea-formed flowers produce a pretty effect. It well merits a place in every greenhouse, and may be obtained at a reasonable price in the public nurseries. It begins to bloom in April and continues for several months.

**ERICA SHANNONIANA.** Lady Shannon's Heath. (Bot. Mag. 4069.) Ericaceæ, Octandria Monogynia. A very neat flowering species. The flowers are produced in umbels of ten or twelve in each. Each blossom is tubulous, a little more than an inch long, white tinged with red, greenish tinge just below the limb or mouth of the flower. It deserves a place in every collection.

**GENISTA VIRGATA.** Twiggy-Broom. (Bot. Reg. 11.) Leguminosæ, Monadelphia Decandria; Synonym Spartium virgatum. A hardy evergreen shrub, growing about four feet high, delighting in a dry situation. It grows very freely, and blooms most profusely from May to July. The flowers are borne in large spikes, very numerous, of a bright yellow. It deserves a place in every shrubbery. Plants may be had cheap at the large public nurseries.

**IPOMÆA CRASSIPES.** Thick flower-stalked. (Bot. Mag. 4068.) Convolvulaceæ, Pentandria Monogynia. From Southern Africa. It has bloomed in the garden of the Earl of Derby, Knowsley Park, Lancashire. A neat climbing plant. Each flower is two inches across the mouth, of a pretty rosy-purple, becoming darker downwards into the tube. An interesting and beautiful species.

**LISSOCHILUS ROSEUS.** Rose-coloured. (Bot. Reg. 12.) Orchidaceæ, Gynandria Monandria. A native of Sierra Leone. It is one of the terrestrial Orchideæ, and the flowers are strikingly beautiful; they are numerously produced in a dense long racemous spike. Each blossom is an inch and a half across; the sepals are of a dark chocolate colour; the petals of a bright rose; lip rosy-crimson, with a yellow stain up the middle. The contrast of the striking colours is beautiful.

**Lycaste Skinneri.** Mr. Skinner's. (Pax. Mag. Bot.) Orchidaceæ, Gynandria Monandria. Lycaste is a new genus separated from Maxillaria. The present species has bloomed in the fine collection of the Rev. John Clowes, of Broughton Hall. Each blossom is about six inches across; sepals pure white, with a faint tinge of crimson at the base; the petals of a more rosy hue, having the tips covered with spots and streaks of brilliant carmine. The column is pure white at the point, mottled with spots of crimson at the base. It is a splendid species, well meriting a place in every collection.

**Spirea Reevesiana.** Mr. Reeves' Spirea. (Bot. Reg. 10.) Rosaceæ, Icosandria Polygynia; Synonym, S corymbosa. It is a handsome hardy sub-evergreen, a native of China, growing about four feet high, and forming a pretty spreading bush. It blooms very freely in the early part of summer. The flowers are produced in terminal heads of near twenty in each, white, each blossom being near half an inch across. It is a very pretty addition for the shrubbery. It can be procured very cheap, and readily increases by cuttings.

**Stigmaphyllon jatrophæfolium.** Jatropha-leaved. (Bot. Reg. 7.) Malpighiaceæ, Decandria Trigynia. A native of Brazil, which will probably do in this country in a warm greenhouse; it has been received in the neighbourhood of Liverpool, and there flourished in a moist stove. It is a very pretty climbing plant, the leaves being beautifully cut at the edges, and of a bright green. The flowers are produced in heads of ten or more in each. A separate flower is near an inch across, yellow. The flower-stems proceed from the axils of the leaves.

**Tetranema Mexicanum.** Mexican Tetranema. (Bot. Mag. 4070.) Scrophularinæ, Didynamia Angiospermia; Synonym Pentstemon Mexicanus. A native of Mexico, and appears to flourish well when grown either in the greenhouse or stove. The plant, when without flowering stems, has somewhat the appearance of a Gloxinia. The flower-stems rise about six or eight inches high; the flowers are produced in capitate umbels, of twenty or more in each, of a pretty rosy-purple, mottled with white. Each flower is about three-quarters of an inch long in the tubular portion, and half an inch across the mouth. It is an interesting and pretty plant; and what renders it additionally so is, that it blooms during winter, viz. from November to May, and is very ornamental through the entire period. It is in the collection of the Royal Botanic Gardens at Kew, and most probably in the principal nursery establishments.

## PLANTS NOTICED IN THE BOTANICAL REGISTER NOT FIGURED.

**Ansellia africana.** When Mr. Ansell, who went with the Niger Expedition, was ill at Fernando Po, he discovered this new genus growing on the stems of the Oil Palm. It is an Orchideous Epiphyte, bearing a terminal panicle of flowers as large as those of Vanda Roxburghii, with dark spots on a pale ground. A living specimen has not yet been received in this country.

**Maxillaria Meleagris.** A stemless species, of little beauty. The flowers are of a yellowish ground, spotted with purple. It is in the collections of Mr. Brocklehurst and Messrs. Loddiges'.

**Trochetia grandiflora.** A handsome stove shrub, a native of the Mauritius, and is in the collection at Sion House Gardens. It has large oblong leaves, dark green, but the underside is covered with brown hairy stars. The flowers are large, pendulous, white, and are produced in threes.

**Oncidium oblongatum.** In Messrs. Loddiges's collection. The petals are flat, not wavy, of a clear yellow, with a few brown marks. It is a very handsome species.

**Maxillaria concava.** Very similar in appearance to M. bractescens, the flowers being a little smaller. It is in the collection of the London Horticultural Society.

Maxillaria corrugata. This new species, discovered between Bogota and Maracaibo, is in the collection of George Barker, Esq. The flowers are of a pale brownish-purple, the lip a yellow ground, with purple zigzag veiny marks.

Brassia. There are now fourteen fine distinct species of this noble Orchidaceous plant, viz.:—

B. lanceana. Flowers bright yellow, spotted with brown, fragrant.

B. augusta. Flowers dull yellow, with brown spots at the base of the sepals.

B. macrostachya. Flowers clear golden yellow, spotted slightly with brown, much darker than the lip. A splendid species.

B. caudata. Nearly allied to the last-noticed species; the flowers are somewhat smaller, greener, and much more mottled with deep brown.

B. bidens, nearly allied to B. caudata; the lip has a yellow ground, and spotted with brown.

B. cochleata. No colour of flowers given.

B. verrucosa. Flowers pale green, the lip being white, marked with green warts.

B. guttata. Flowers greenish-yellow, spotted with green. A fine species.

B. brachiata. Flowers pale brown, with very distinct brown spots.

B. aristata. No colour of flowers given.

B. peruviana. Flowers yellowish-green, spotted with purple.

B. maculata. Flowers olive-brown, blotched with purple; the lip cream-colour, with purple spots.

B. Clowesii. Flowers having the sepals of a yellow ground, blotched with deep chocolate brown; lip violet at the base, with a white tip. A fine species.

# PART III.

## MISCELLANEOUS INTELLIGENCE.

### QUERIES.

A List of Azaleas and Rhododendrons.—I am having what some term an American garden formed, and noticing that in the two last volumes of the Cabinet you have given an interesting descriptive list of Rhododendrons, Azaleas, &c., as exhibited at the Show, in King's-road, Chelsea, I should be much obliged by a more extended list to aid me in selecting an extensive assortment of all the finest kinds to furnish my garden to advantage.

Westmoreland, February 3, 1844. Juvenis.

[The Rhododendrons will do in our next Number. The following list contains nearly all the hardy Azaleas. The names of most describe the colour, or floral character, of the kinds, and our correspondent will readily make a desirable selection of these very lovely sweet flowers.—Conductor.]

### AMERICAN PLANTS.

AZALEAS.

Adelaide.
capriflora.
— concinna.
— interesta.
— ornata.
— rubro crocea.
alba flavescens rosacea.
Alexandria.
Amabile.
amæna.
ardens.
aurantia.
— major.

AZALEAS.

aurea.
— crispa.
aurantiaca.
— coccinea.
— superba.
autumnalis.
Backii.
Badia.
Belle-rosetta.
bicolor.
— grandiflora.
calendulacea coccinea.
— crocea.

calendulacea elegans.
— eximea.
— flammea.
candida.
candidissima.
Cliveana.
carnea delicatissima.
— elegans.
Coburghii.
coccinea.
— major.
cœli rosea.
colorata.
— macrocephala.
comitissa flandria.
concinna.
Cordor.
coronata.
coronaria.
Creei.
crocea distincta.
— splendida.
cruenta.
cuprea splendens.
— eximea nova.
decushortorum.
dianthaflora.
double blush.
Duchess de Parma.
dulcedo.
early white.
electa.
elegans Morteri.
— tardiva.
elegantissima.
Ferdinando.
fissa.
flora provincialis.
genis Morteri.
glauca.
— plena.
globosa compacta.
gloriosa.
gloria mundi.
— patria
— triumphans.
— universalis.
grandissima.
Guillemus primus.
honesta.
ignescens.
incana.
imperialis maxima.
— superba.
incarnata crispa.
— superba.
incundo.
lateritia stellata.
— striata.
l'imperatrice.

## AZALEAS *continued.*

magnificens.
mirabilis.
— grandiflora.
monstrosa fasicularis.
— variabilis.
Morteri.
Murryana.
nudiflora.
— crispa.
— læta.
— nosegay.
— rubra.
— Tayler's red.
ne-plus-ultra.
nilens.
nymphea.
optima.
ornata-rosea.
papilionacea.
penicellata stellata.
perfecta.
pictura subtilissima.
plumosa.
pontica.
— alba.
— — Thomson's.
— compacta.
— globosa.
— grandiflora.
— flavicoma.
— multiflora pallida.
— macrantha.
— mirabilis.
— princeps.
— salmonea.
— tricolor.
— versicolor.
— Zebrina.
— Watererii.
— sulphurea.
— — ornata.
— — dissecta.
— — grandiflora.
— — grandissima.
— — pallida.
præstantissima.
prænitans.
Princess Marion.
pulcherrima.
punicea.
purpurea.
— grandiflora.
rava.
rosa-sinensis.
robusta.
rubescens.
— grandiflora.
— speciosa.
rubra-marginata.
rubracata.

**AZALEAS** *continued.*
salicifolia.
saltatoria.
scabra.
seraphina.
specula.
spectabilis.
speciosa-aurea.
— conspicua.
— atro-sanguinea.
— hæmantha.
— pulchella.
strophantha.

**AZALEAS** *continued.*
sinensis.
triumphans.
translucida.
versicolor.
— grandiflora.
viola odorata.
Victoria modesta.
viscocephala.
vittata.
— conspicua.
viscosa alba.
— conspicua.

THE LANCASHIRE TULIP GROWERS.—The Northern Florists, anxious to ascertain if they really have any flowers worth growing or not, will be glad to know on what terms it will be agreeable to you to meet them in "The Lists" at York.

They would wish you to provide one judge and themselves another, and an umpire to be chosen by these two.

From the manner in which their Tulips are spoken of in the periodicals of the day, they are apprehensive "there is something rotten in the state of Denmark," and they would like to right the matter if it can be done.

Any communication through the present channel, or addressed post-paid to Mr. Amor Minor, Post-office, Gateshead, will have immediate attention.

Northern Florists' Arbour, February 14, 1844. AMOR MINOR.

ON VERBENA SEED.—Last autumn I saved a quantity of Verbena seed collected from a bed containing twenty of the best kinds. When and how am I to sow and afterwards treat the plants; also, will they bloom the ensuing summer?

Kingston. EMILY.

[Sow the seeds in pots in March on a fine and smooth surface of good loam, and after pressing the seeds to the soil, just cover them with some finely sifted, and place the pots in a cucumber frame at work. When the plants are large enough, transplant them, several into a small pot. After they have struck root, again remove them to where more air can be given, and so to inure them to the climate, that by the middle of May they may be fit to plant in the open garden, where they will bloom by the end of June or early in July, unless some casuality prevent.—CONDUCTOR.]

ON ARISTOLOCHIA, CYPRIPEDIUMS, &c.—Being a subscriber to your FLORICULTURAL CABINET from its commencement, I take the liberty of asking if you can inform me where I may procure seeds of the Aristolochia clematitis, Cypripedium calceolus, Pyrola rotundifolia, and Cascuta of varieties. As these are rare plants, or by no means frequent, and as I feel greatly interested in British botany, it would confer a favour if you could occasionally insert articles or extracts on rare and curious British plants, and also figures of them, as you did in the first volume; and this, I think, the greater part of your readers would, as well as myself, be glad to see commenced. As the study of botany is at the present day the delight of all classes, and being of so innocent and pleasing a character, it cannot be too greatly extended, and the large circulation of the CABINET is capable of doing this with advantage at the same time to itself. Perhaps you may be able to inform me of a periodical work entirely devoted to botany, at about the same price of the CABINET, with coloured engravings.

[Baxter's coloured copy of British Botany, published in monthly numbers, would be found useful. Seeds of the kinds named cannot readily be obtained. We think it very likely plants may be had of Loddiges's, of Hackney, or Young's, of Epsom, in whose catalogues they have been inserted.—CONDUCTOR.]

On a Box in which to sow Ranunculus Seeds.—Mr. Lightbody has given what appears to me some very valuable instructions on the culture of the Ranunculus; he has gone into detail very minutely on raising that beautiful flower from seed. Will any of your numerous correspondents be kind enough to inform me, in an early number of the Cabinet, what the dimensions of a box should be (depth in particular) to sow, say a 5*s*.-packet of seed in? I know Mr. Lightbody would willingly inform me if I was to write to him, but as that gentleman has devoted so much of his valuable time in enlightening the floricultural portion of the public upon the subject, I think it would be taxing his good nature too closely to trouble him further upon the question at present.

Crayford. Thomas Middleton.

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On the Magnolia.—I have two Magnolias which have been in my possession fourteen years, but which have not bloomed. Four years back I removed them in order to induce them to flower; but although they grow well since, there is no signs of my object being realized. If some reader of the Cabinet would favour me with particulars to adopt so as to obtain a bloom, I should esteem it a great kindness.

A Beginner.

[The species of Magnolia and the site the plant occupies, &c., should be given by our correspondent. The answer about cucumbers, &c., is inserted on the wrapper of the present number.—Conductor.]

On Petunias and Lilium lancifolium.—An old subscriber would be much obliged to the Conductor if he would be kind enough to inform her, through the medium of the Floricultural Cabinet, where, and at what price, she can procure plants of the Petunias figured in the June Number of the fifth, and in the July Number of the sixth volume, and also of the Lilium lancifolium figured in the February Number of the seventh volume.

February 15, 1844.

[Some of those figured we believe are now lost; others of them we, as well as other nurserymen, possess. Since that time numerous intermediate hybrids have been raised very similar in character of flowers. They average 1*s*. each. We purpose, when the plants we have bloom, to prepare a descriptive list of forty of the best kinds during the ensuing season. The Lilium lancifolium album is 3*s*. to 3*s*. 6*d*. per flowering bulb, L. lancifolium punctatum 5*s*. to 7*s*. 6*d*.

Conductor.]

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On Guano Manure.—In this month's Number of the Floricultural Cabinet, page 44, there is an article which speaks highly of Guano as a manure for grass land. I beg to observe that I tried it last year on three several acres of grass lying apart from each other, applying on the 25th of April to one of them 1 cwt., to the second 1 cwt. and a half, and to the third 2 cwt. The ground was damp at the time and it rained the two following days. Not the slightest visible effect was produced. No manure of any description was put on the land immediately adjoining the patches to which the Guano had been applied; but not an individual, who was asked to point out the spots, could say which part had had Guano and which not. Two of my neighbours tried some of the same lot, one with wheat, the other with potatoes, and both found their crops benefited. I made some experiments with it also in the kitchen garden. Strawberries were killed by it, and carrots, parsnips, lettuces, and onions, more or less injured. Cabbages appeared slightly benefited. Will some conversant with the use of the Guano oblige me with early information as to the best mode of applying this far-famed manure, by which I may hope to reap the same advantage from the use of it in future that others are stated to have done.

Tonbridge Wells. An Original Subscriber.

## REMARKS.

On Plants affected with Mildew.—In a former number of the Cabinet I observed a correspondent stated that during several previous months a quantity of his Pelargoniums and other plants had suffered from mildew, although the house was not a cold or damp one. I was similarly circumstanced, and being advised to water them at the roots once a week with nitre dissolved in water, in the proportion of a quarter of an ounce to a quart of water, I did so through the remainder of last autumn, and now have not a vestige of the mildew.

Sidmouth. Lucy.

Winter blooming of Carnations.—I had a quantity of the old Clove Carnation, French Piccottee, &c., grown in pots last year. Early in October I removed them into a greenhouse, giving them proper attention as to watering, tying up, &c., and by the end of December I had a splendid bloom of these fragrant beauties, and which are still in fine condition.

Near Bath, February 8, 1844. Mary Hamilton.

China.—Advices have been received from Mr. Fortune, engaged in collecting seeds for the Horticultural Society in China, dated Chusan, November 12. He describes the whole coast of China to the northward as consisting of bare rugged rock, barren sand, and burnt gravelly clay, but with beautiful plants here and there. He had met with very bad weather in his passage to Amoy, but had had an opportunity of exploring the islands of Koo-long-soo and Amoy. On the voyage thence to Chusan, the vessel encountered heavy gales in the Formosan Channel, and was twice driven back, once to Chinchen, and once to Chamoo; this, however, gave him the opportunity of landing at those places, and exploring the country for several miles inland. On no occasion had he met with serious obstacles to penetrating the country, but, on the contrary, found the natives particularly civil, much more so than on the coast further south and at Canton. Mr. Fortune had fallen in with hills covered with Azaleas, and with several other good things, seeds of which, in very small quantities, were enclosed in his letters. In particular, he had met with a very beautiful Buddlea, with rich purple flowers, arranged in clusters like a Lilac; and a very fine Campanulaceous plant, with flowers as large as those of Lisianthus Russellianus. What he had seen of China gave him great hopes of fully realizing the anticipations of the Society. He was about to proceed to Shang-Hai and Ning-po.

On Saltpetre as a Manure.—I have applied Saltpetre, Guano, and Nitrate of Soda during the last season on three equal portions of my land, viz., a quarter of an acre, and sowed with wheat. The portion on which Saltpetre was applied produced one quarter of corn more than either of the other, Guano being the least. Of Guano I applied six stones; of Saltpetre and Nitrate of Soda three stones each. Agricola.

On the application of Charcoal in the Soil in which Pelargoniums are growing.—In the early part of last spring I saw an article in the Cabinet recommending bits of Charcoal to be mixed in compost used in pot culture of plants. Having a quantity of young Pelargoniums to pot I adopted the plan by sprinkling about one-eighth with the rich turfy loam and vegetable soil, and, having a free drainage, nothing can exceed the deep green beauty and vigour of the plants at this time. An Amateur.

Mile-End.

On preserving the Vitality of Seeds.—The Editor of the Gardener's Chronical, in the leading article, observes, that the gardener of Colonel Reid, Governor of Bermuda, had adopted the following most successful method of preserving the vitality of Seeds at that place, where, in consequence of the sudden and violent changes, there exists the greatest difficulty in retaining their germinating power. Early in May last the gardener, recollecting the evenness of the temperature which existed at the bottom of a cistern of water that was five feet below the surface of the ground, he carefully sealed up a bottle of Onion seed which he had just received from Madeira, and after having it securely cased in brown paper, the package was then deposited at the bottom of the cemented cistern. On the first of November the seeds in this bottle were sown, as well as the contents of other bottles which had been kept in the usual sealed way in an airy and cool warehouse during summer. Of the seeds of the latter bottles from about one-tenth to one-fifth came up of some, but of one not a single plant sprung up. The seeds preserved in the bottle immersed in water came up admirably, and as quick as new seed.

[Some of our correspondents have, on several occasions, referred to the difficulty of preserving seeds when obtained in remote parts of the world from this country, but any facility of immersion, &c., being at hand, either before commencing a voyage, or during the passage, in ship's tanks, &c., it is highly probable that seeds having a more uniform temperature may be brought here with perfect safety.—CONDUCTOR.]

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ON EDGING FOR A WALK.—For several years I have had the following mentioned kinds of plants for edging to walks, and they combine neatness with beauty; they have been admired by all who have seen them:—Erica herbacea, and its varieties, grow about four inches high, and are easily kept compact; mine are six inches in breadth, and they commence blooming about the middle of January, in warm situations, and continue one mass of bloom for several months. Flowering, too, at so dreary a season in winter, it is a very interesting object to have in view from the dwelling, or frequented walk. Erica cinerea, with it several varieties, also makes a very interesting and pretty edging. When out of bloom it has a neat and pleasing appearance: they bloom from July to the end of the summer. Menziezia polifolia alba blooms dwarf, when four to six inches high, and its beautiful pearl-white flowers produce a very pretty effect; it begins to bloom in June, and continues to the end of the season. There are others of the Menziezias, as purple, rosy-red, &c.; also several others of the Ericas which are also suitable for the purpose, but the three named kinds are what I possess, and have so adopted. I have sandy peat to grow them in. CLERICUS.

A Midland County.

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ON OBTAINING BOTTOM HEAT BY THE TANK SYSTEM.—I have read about, and seen a good deal, of the new mode of obtaining bottom heat by the tank system; and although it may be all that is desired where the plants are confined in pots, and plunged in some material, &c.; also the soil in which they grow is not made wet by the damp arising from the water in the tank, but where the roots of the plants, as is usually the case with melons, cucumbers, &c., have to grow in the soil into which the moisture from the tank is allowed to pass, I am confident it is injurious. I have found that the lower portion of the soil is so saturated by it as to become soddened like soft clay, and this increases upwards in proportion to the period the heating of it is continued, and the plants growing so circumstanced become sickly. The gaseous products of fermenting matter, as used in the old mode of obtaining bottom heat, is a very different thing in its operations and nature, as used for bottom heat, and very much superior to the heated water. And as to the use of the tank system to heat the space of a greenhouse, it is very unsuitable for such a purpose, more especially so as heat is only required in the dull cold months of late in autumn and in winter. For a plant stove, it will serve well by proper management.

Essex, February 14, 1844. A PRACTICAL MAN.

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LAWS OF GARDENS.—The few following remarks may prove beneficial to some of your numerous readers, and perchance save them many useless and unpleasant differences either as landlords or outgoing and incoming tenants. Annual roots and flowers planted in a garden may be removed by any tenant, and so may young fruit-trees and shrubs in the garden or nursery of a person to whom the same has been let for the purpose of sale or trade—2 East's Reports, page 88. But unless a garden or orchard, or other land, has been so let as nursery-ground, no tenant can, as between him and the landlord, remove any flower, root, tree, or shrub, not strictly an annual, or not usually taken up at one season of the year and replanted at another; and if without authority he should remove the same, he would be liable to an action for the waste. And if a tenant of any description has made strawberry-beds, he cannot, either before or at the expiration of his tenancy, and whilst they are likely to continue productive, remove or destroy the same, without being liable to an action for injury to the landlord or succeeding tenant—1 Campbell's Reports, p. 227.—A SUBSCRIBER.

ON BIGNONIA VENUSTA.—I observed in an early Number in 1841, the Conductor recommends as a hot-house climber the beautiful flowering Bignonia venusta, I immediately procured a strong plant, planted it out on the corner of a bark pit in a vinery, enclosing the soil for its roots in a wood case, with numerous holes bored in the two sides next the bark for the roots to push through into the bark. During the last two summers the plant has been trained horizontally from pillar to pillar, which are uprights under each rafter at the back of the pit-wall, and whilst the plant has grown vigorously, the horizontal position I find has most materially promoted the production of flowers, and a profuse bloom has been afforded from June to October. It is one of the loveliest flowering climbers; its beautiful buff-coloured, long trumpet-formed flowers, in large and numerous clusters, render it an object of admiration, and worth a place in every vinery or plant stove. CLERICUS.

## FLORICULTURAL CALENDAR FOR MARCH.

AMARYLLISES, and other liliaceous bulbous plants which have been kept dormant, may now be re-potted, and put into an increased temperature.

ANNUALS, HARDY, such as Clarkias, Nemophilas, Larkspurs, &c.—If the soil be moderately dry, some of the most hardy kinds, to bloom early in the summer, may be sown in warm parts of the country, or situations well protected, but in cold places, not until the end of the month; for if the seeds of many sorts begin to vegetate, and frost operate upon them, they are often destroyed. The best method of sowing the small seeds in patches is to have a quantity of finely sifted soil; spread a portion where desired; after scattering the seeds, sprinkle a little more soil over them, and then press it closely upon the seeds, which will assist them in vegetating properly.

ANNUALS, TENDER, such as Cockscombs, Balsams, Stocks, &c.—Such as have been sown and may be up, should have all possible air given to prevent their being drawn up weakly. In watering those in pots they must not be watered over the tops, or many of the sorts will be rotted by it. The best method is to flood over the surface of each pot, always using water that is new-milk warm. Those annuals sown in frames must be watered (when requisite) with a very fine syringe, or pan rose to sprinkle with; but the best plan is to take advantage of gentle rains. For any seeds yet requiring to be sown, use fine soil pressed to the seeds, and when convenient, place the pots (if used) in moist heat till the plants are up. Cockscombs, Amaranthus, Balsam, Browallia, Brachycoma, Thunbergias, Maurandias, &c., if large enough to pot, should be done in sixty sized pots.

AURICULAS.—Those requiring top-dressing should be done immediately, by taking off about two inches deep of the top-soil, replacing it with some very rich; more than one-half of it should be rotten cow-dung two years old, and the rest loam and sand. Immediately after this dressing, let the soil be well settled by a free watering. By the end of the month the unexpanded blossoms will be nearly full grown; no water must be allowed to fall on them, or the blossoms would be liable to suffer injury by it. All possible air may be admitted to the plants during the day, only screen from cutting frosty winds.

CAMPANULA PYRAMIDALIS—to have fine pot specimens should be potted, if not before done, and encouraged to grow.

CARNATIONS—at the end of the month, the last year's layers kept in pots or beds during the winter should be planted off into large pots 12 inches wide at the top, 6 at the bottom, and 10 deep. In each pot three plants may be placed triangularly, not planting deeper than to fix them securely. The following compost is most suitable:—Two barrows full of fresh yellow loam, three of well-rotted horse-dung, and half a barrowful of river sand, well mixed; plant in it *without sifting*, but breaking very well with the spade, and have a free drainage of rough turf, &c.; place the plants in a sheltered situation out of doors.

Creepers—and twining greenhouse or hardy plants, should be pruned and regulated before they begin to grow.

Calceolaria Seed—should be sown early in the month, having the finest sifted soil for the suface.

Chrysanthemums—sow seed of, and raise in moist heat. Mind the suckers of old plants are not drawn up; admit duly of air.

Commellina tubers and Tigridia bulbs should now be planted.

Cuttings of Talvias, Fuchsias, Heliotropes, Geraniums, Celsias, Alonsoas, Lotuses, Senecios, &c., where it is desired to plant such out in beds, should be struck in moist heat as early as possible. Young shoots, cut off clean, strike readily. (See kinds of plants suitable, in vol. i. p. 38, and for additional kinds, subsequent vols.)

Dahlias—if not already put into excitement, should be done as early as possible. Seeds should also be sown, placing them in a hot-bed frame till up. Cuttings be taken off and struck in heat.

Achimenes, Gesneria, Gloxinia, and Tropæolum bulbs, &c., that have been kept dry during winter, should now be potted, and gently brought forward in heat.

Herbaceous perennials, biennials, &c., should now be divided, if required.

Hydrangeas.—Cuttings may now be taken off, cutting off the tops of any shoots that have very plump leading bulbs about one inch below the bud of each cutting. These inserted, each into a small pot, and placed in moist heat, will soon strike root, and will, with future proper treatment, bloom one fine head each, strikingly beautiful. To make them bloom blue, use charcoal (see present Number thereon).

Pelargoniums.—Cuttings now put in, struck in a hot-bed frame, and potted off as soon as they have taken root, will bloom during autumn.

Polyanthuses—should now be top-dressed, as directed for Auriculas, only the soil need not be so rich. Seed may now be sown; the best method is to raise it in heat, harden gradually, and transplant when large enough.

Ranunculuses and Anemones—should now be planted, taking care no fresh applied dung is in the soil, nor should the ground to plant in be lightened up more than two inches deep. The soil of the bed should be half a yard deep at the least. The best roots for flowering are such as have the crowns high and firm, with regular placed claws. Another bed, planted a fortnight later, brings them into bloom, so as to assist a florist to select for a show.

Rose Trees—not yet pruned, if allowed to remain untouched till the shoots of the present coming season be about an inch long, and be then shortened by cutting back all the old wood to below where the new shoots had pushed, the dormant buds will then be excited, and roses will be produced some weeks later than if pruned at a much earlier season. Plants in pots now put into heat will come into bloom in May.

Rose Trees, Lilacs, Pinks, Hyacinths, Narcissuses, Honeysuckles, Primroses, Double Furze, Dwarf Almonds, Rhodoras, Persian Irises, Sweet Violets, Cinerarias, Azaleas, Hepaticas, Lily of the Vally, Jasmines, &c., should still be brought in for forcing.

Tuberoses—should be planted, one root in a small pot, using very rich sandy soil; the pots should be placed in moist heat till the plants are up a few inches, then they may be planted into larger pots, and taken into a stove, and finally into a greenhouse.

Tulips.—At this season, such as happen to be affected with canker will appear sickly; the roots should be examined, and the damaged part be cut clean out. If left exposed to sun and air, the parts will soon dry and heal. Avoid frosty air getting to the wound by exposure.

Seeds—of greenhouse and similar plants may now successfully be sown, raised in moist temperature.

*Fuchsia "Constellation"*

# THE
# FLORICULTURAL CABINET,

APRIL 1st, 1844.

## PART I.
## EMBELLISHMENTS.

### ARTICLE I.
### FUCHSIA CONSTELLATION. Var. CLUSTER-FLOWERED.

Onagraceæ. Octandria Monogynia.

A person possessing extensive knowledge, almost unbounded wealth, having every facility and opportunity to gratify the sight, has stated "the eye is never satisfied with seeing." In order to provide variety and beauty to meet desire, gigantic powers of mind have been skilfully engaged in ingenuity in every varied form which art and device could accomplish, to the production of objects to gratify the sense of vision; but after all that has been accomplished in other things, the works of God, as displayed in what are usually termed the "productions of nature," infinitely exceed them all in number, perfection, and beauty; and to a person of a contemplative and admiring mind, which every real florist possesses, there is nothing terrestrial so elevating to our ideas of beauty as the subject of flowers; and of all rational amusements the cultivation of plants is not only the most rational, pleasing, and interesting, but is unequalled in providing suitable objects to gratify and delight the sight of man.

For a considerable number of years the Florists of Great Britain and Holland have been enjoying the luxury of raising innumerable varieties of what are technically termed *florists' flowers*, as Tulips, Hyacinths, Ranunculuses, Carnations, Pinks, Picotees, Polyanthus, Auriculas, &c.; but during the last twenty years, and more especially the recent portion of that period, many cultivators of other classes of plants, as Camellias, Azaleas, Fuchsias, Calceolarias, Cinerarias, Pelargoniums, Rhododendrons, Chrysanthemums, &c., have paid attention to hybridizing the most dissimilar kinds, and rendering them highly popular flowers. Since the introduction, in the year 1837, of Fuchsia fulgens, and subsequently of F. corymbiflora, a fresh impulse has been given to the raising hybrids between these species and others, the result has been the production of numerous striking varieties, amongst which are some possessing great beauty, and highly deserving a place in every collection. The entire family of Fuchsias are objects of interest and attraction; the growth of the plants is graceful and pleasing; but when ornamented with a profusion of their elegant, pendant, highly and variously coloured blossoms, they become peculiarly beautiful, and give the whole of the kinds a superior claim to a situation wherever they can be introduced; as nearly all the kinds can be grown too with equal success in the open air, pit, frame, greenhouse, conservatory, or sitting-room; in form, as bushes, standards; or trained to a wall or trellis; and to bloom at least nine months in the year under protection.*

The handsome kind now figured was raised by Mr. Miller, nurseryman, of Ramsgate in Kent, and is an hybrid produced between F. fulgens and F. corymbiflora. The blossoms on the raceme, which Mr. Miller forwarded to us last season, were in a great measure separated when it arrived, but it appeared to be formed in the character of F. corymbiflora, more close, however, and forming a broad bunch. It deserves a places in every collection.

## ARTICLE II.

## FLORICULTURAL GLEANINGS.—No. 14.

### WHAT IS THE SHAPE OF A PERFECT TULIP?

BY MR. WILLIAM HARRISON, SECRETARY TO THE FELTON FLORISTS' SOCIETY.

An inquiry into the form necessary to constitute a perfect Tulip will no doubt be interesting to many of the readers of the FLORICULTURAL CABINET for 1844. The taste for this loveliest and most fascinating of all the florist's flowers is fast extending itself over almost every part of the kingdom,; the choicest and purest varieties are bought up with eagerness by the competing florists, in even the remotest localities; and there is every prospect of the march of floral taste extending itself in a short time to every town and village of any importance in the kingdom.

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* The Fuchsia may well be deemed a most popular flower.

That such a desirable state of things would be beneficial to society at large there can be no reasonable doubt. For what can be so harmless an amusement in a neighbourhood as a competing florists' society? What can be so delightful a recreation to a man as the pleasing occupation of looking after a garden? And how are the pleasures of a garden enhanced a thousand fold after the proprietor becomes a florist, and especially after he becomes a Tulip grower! The rude sports of our ancestors are neglected and almost forgotten, and the leisure hours of the tradesman are spent in the more agreeable occupation of meditating on the magnificent productions of the Almighty hand,—in no scene more lavishly displayed than in the gorgeous sight of a Tulip bed in full bloom. What has become of the cock-fights and bull-baitings of the last century? Gone! like the visions and superstitions of our ancestors. Departed! like the generations who enjoyed them, and succeeded by enjoyments of a more rational and ennobling kind. Let us then hope that this sign of improvement in society will continue and keep progressing; that happiness and comfort will soon be more generally diffused throughout our population, and that education and floriculture will shortly spread their precious boons more widely over "our sea-girt isle."

There is no flower more worthy of the attention of the modern florist than the Tulip; certainly none more worthy of occupying the pages of a floral publication. It is supposed by many to be the "lily of the field," alluded to by our Saviour in his admirable sermon on the mount; and this is probable, as it is a native of the Levant, and common throughout all Syria. "Behold the lilies of the field," says he; "they toil not, neither do they spin; and yet I say unto you, that even Solomon in all his glory was not arrayed like one of these." If, therefore, this flower in its wild state drew down such marked admiration from the Saviour himself, shall we cease to admire it now in the almost perfect state to which it has been brought by modern florists? Impossible.

Unfortunately for the "Southlandler," the space occupied by this article will be thrown away. The fine sympathies that pervade the bosom of the ardent Tulip grower seem never yet to have penetrated his, and he would rather felicitate himself over his " pounds and shillings saved," and his " Single Anemones," than enter into the Tulip growers' high anticipations of fine blooms from newly imported varieties. What would be the use of talking to him of the fine pencilling of Ely's Queen Victoria or Lawrence's Damascus, or the fine flaming of Dickson's Duke of Devonshire, Lawrence's Shakspere, or a fine Polyphemus? What would he care for the beautiful feathering of a Lady Crewe, a Claudiana, a Comte de Vergennes, or a Jeffrey's Royal George? What would they be in comparison with his penny beauties and his " pounds saved?" He would brush them all from the floral arena " at one fell swoop," put his huge extinguisher over the whole, hurl their ambitious raisers into floral oblivion and despair, and substitute his " Single Anemones " in their stead.

Really, Mr. Editor, it is almost impossible to believe that any individual can be found, in the present advanced state of floriculture, entertaining such absurd ideas, and yet we have proof of the fact by the appearance of his paragraph in your December Number. But as this must proceed either from sheer ignorance of the merits of this favourite flower, or from a want of taste for the beauties of nature, and as every man has a right to ride his hobby-horse as he pleases, the Tulip growers of England, in the midst of their manifold enjoyments, may well afford to allow the " Southlander " to bestride his miserable jackass after his own fashion. He cannot, however, prevent them from considering Scott's beautiful lines in the " Lay of the Last Minstrel," with the change of a few words, as peculiarly applicable to himself:—

" Breathes there a man with soul so dead
Who never to himself hath said,
*This Tulip bed is a glorious sight?*

* * * * *

If such there breathe, go mark him well,
For him no minstrel raptures swell;
High though his titles, proud his name,
Boundless his wealth as wish can claim,
Despite those titles, power, and pelf,
The wretch, concenter'd all in self,
Living, shall forfeit fair renown,
And, doubly dying, shall go down
To the vile dust from whence he sprung,
Unwept, unhonour'd, and unsung!"

But what are the properties of a first-rate Tulip? Methinks I hear you now saying, Have patience, gentle reader, and we will now inquire. There are various opinions on this subject; and, as "A Star in the North" has twice of late repeated his opinion, that the proper form for the Tulip is "a semi-oblate spheroid," it is highly necessary to inquire into the correctness of his standard. What, then, is "a semi-oblate spheroid?" a spheroid is a solid formed by the revolution of an ellipse about one of its diameters, and when this revolution is made about the conjugate diameter it is called an oblate spheroid. If the conjugate and transverse diameters be to each other in the proportion of three to four inches, then the breadth of a Tulip cup, in the form of a "semi-oblate spheroid," would be four inches, while its depth would be one inch and a half. Should the transverse diameter be four inches, and the conjugate only two inches, then the breadth of the cup would remain four, while the depth would be only one inch, which, in my opinion, would be too near an approach to a horizontal plane to have any resemblance to a fine cup or beautiful goblet, to which the Tulip cup has often been compared. As the lengths of the diameters assimilate to each other, the spheroid approaches a globe, and when the two diameters become equal the two solids are identical; so that on reconsidering the subject, the "Star in the North" will perceive that he has given his definition of a fine Tulip in terms totally indefinite! What proportion he would therefore have to exist between the diameter of his standard cup and its depth we are totally at a loss to know, as a semi-oblate spheroid, whose relative dimensions are not given, may in fact be little thicker at its polar diameter than a line; or it may, at its maximum, become a complete hemisphere. It may, in fact, be as variable as the shades of the leaves in an autumnal forest, and the propriety of such a standard is therefore quite out of the question.

Having thus, I trust, sufficiently shown that the "semi-oblate spheroid" is too variable a standard to be worthy of adoption, let us now inquire what the most perfect shape would be for the cup of the Tulip. I think no one that is unprejudiced would disagree with Mr. Glenny on this point—that the Tulip cup should be some part of a hollow sphere, as that is a shape which remains unchangeable, although there may be many opinions regarding the depth which the cup ought to possess. Mr. G. advocates the third or the half of a hollow ball, as the most perfect shape, giving, as his reason for adhering to so low a cup, that it gives the best opportunity for inspecting the whole of the interior of the corolla; and this is perfectly true; but the most of the north-country amateurs would view a Tulip which had opened to the third of a hollow ball quite in the light of a falling flower, and for this reason would protest against it.

It is worth while for any amateur who has not paid much attention to this subject to make a few drawings for himself, and he will then soon see that the third, or even the half of a hollow ball is but a very shallow cup. Let him describe three circles of four inches diameter each; cut one of them into two equal parts, and then he will have a cup four inches wide and two deep, which is about the greatest depth that Mr. Glenny would allow, but which the Northumbrian amateurs would say was "meagre," and rather too shallow. Let him cut off a quarter of the height from his next circle, and he will then have a cup remaining which will be about three inches and a half across the top, and three deep, which is the standard laid down by Mr. Slater at the beginning of his "Descriptive Catalogue." This forms a very fine cup, and there can be no fault found with it but one, and that is, that the petals are then beginning to incline so much inwards that judges would find it rather difficult to inspect the marking of the inside of the petals near the top of the cup. This would be a fatal blemish in form with many of the southern florists.

Let the inquirer now cut a third from the height of his last circle, and he will then have a cup remaining, which, in my opinion, is decidedly preferable to either of the foregoing; it will be about three inches and three quarters in breadth, and two and a half deep. This seems to me to be the standard nearest perfection, and which will be most likely to please both northern and southern amateurs, how fastidious soever they may be. It is not deep enough to be condemned by the southern florists as a long or egg-shaped cup, and is sufficiently wide at top, and the petals so little inclined inwards that a complete inspection of the interior of the corolla may easily be made; and it possesses a sufficient depth to rescue it from condemnation by the Northumbrian judge as a shallow "meagre" cup, or a flower on the point of falling. For all these reasons, therefore, I am inclined to contend that two-thirds of a hollow ball is nearer the true shape than either of the standards above mentioned.

"The Star of the North" is evidently a satellite of Mr. Groom's, who advocated the "semi-oblate spheroid" idea at a meeting of the London Floricultural Society, April 5th, 1842, and was combated by Mr. Bowler, who seems to dislike this shape as much as any of us; and as many of the readers of the CABINET may not have seen this, I shall take the liberty of quoting his opinions on the subject.—(See "Gardener's Chronicle," April 23, 1842.)

"Mr. Bowler then commenced his remarks on Mr. Groom's paper on the Tulip, from which he differed in many material points, prefacing his account with a short notice of its physiological structure. He observed that Mr. Groom had recommended a semi-oblate spheroid as the most perfect form, which in his (Mr. Bowler's) opinion was the very worst that could possibly be, not having sufficient power to retain its general outline; neither should the pole be depressed—in our best flowers it was not. He did not agree with Mr. Groom that the petals should have a gradual swell; this, with a semi-oblate spheroidal form, would produce quartering, and convert a beautiful outline into the resemblance of a common brace made by an unskilful hand. In his opinion the semi-globular was the more preferable, and was the medium form of all our best Tulips. It had been remarked that the third of a globular ball would represent the best shape; but he had never met with it, and in his idea it would present a meagre form. The edge of the petals should be unbroken; their greatest width near the top, which would prevent all quartering, (a term which in reality meant dividing into four; whereas the Tulip parts into six; and it would be better, in his opinion, if sextalising, or some more proper term, were substituted,) which is, however, greatly counteracted by night-covering. Sometimes the sepals fall first; at others, as in Rose Brilliant, petals and sepals fall together. With respect to colour, that of the ground is an important object; it varies from white to an intense yellow, the pure white and bright yellow being the best. The feather, whether broad or narrow, should be insensibly lost towards the centre of the petal in the ground colour, and forming fine unbroken lines, either alternately yellow and black, or white and rose. The true flame consists of a mass of colour in the centre of the petal, having an irregular and angular outline. It is usually associated with the feather, but it is impossible to associate it with the broad feather. The starry bottom is too well known and appreciated to need much description; a flame without a feather often has the appearance of a star, although the absence of it was not necessary to form a star. He did not agree that flushing in colour was caused by damp, since as many flowers flushed in the open border as in the stage; in many it was an inherent quality, the effect only being known and not the cause. For colour, cleanliness, and texture, he would mention Cerise, Blanche, and Gloria Mundi, which had always been appreciated and held their place, while thousands of others had been thrown away. In the former, the cuticle was particularly beautiful, and gave it that fine glossy appearance which it possessed; and also in Rose Brilliant, which had stood the test for thirty years."

From this it appears that Mr. Bowler is an advocate for the half of a hollow ball at least; and if he had only added a little to the depth of the cup I think that a great many of the Northumbrian amateurs would have agreed with him. It thus appears that in advocating his favourite shape, the "Star in the North" is likely to find himself nearly in the "glorious minority of one."

I must beg leave to differ from the "Star in the North," when he says that the first property of the Tulip is shape. Shape may fairly lay claim to the second property; but if a Tulip has not a clean bottom every experienced grower knows how little it is worth, whatever may be its shape or marking; and therefore a pure bottom, in my opinion, is decidedly the first essential property. What, for instance, is the reason why Louis XVI. is not more generally bought and cultivated by amateurs? Why does it not take its place in the London stands of winning flowers, while such flowers as Holmes's King, and Rougeatre, Franciscus Primus, and Violet Imperial are allowed that honour? The reason is obvious—its bottom condemns it. Although it possesses a beautifully rounded petal, florists who have severe competition will not throw away their money for it, since it would be passed over by good judges, and the preference given to some of the cleaner-bottomed flowers. If, therefore, shape will not rescue this celebrated variety from neglect, how can shape be considered the first property? I merely mention this variety by way of illustration.

Much credit is due to Mr. Slater for the industry and research displayed in his "Descriptive Catalogue;" and though we may differ in some minor points, the great mass of information it contains must be a decided boon to the purchasing amateur. I myself have acted upon it, and have added considerably to my stock of feathered varieties this last autumn, and trust they will turn out according to the descriptions given. But the remarks embodied in his descriptions afford another proof of the great difference of taste which prevails in the different localities, and prove that the stained-bottom varieties, in the Yorkshire districts at least, are yet allowed to win. This is evident from the descriptions of Coggeshall Hero, La Belle Narene, Louis XVI., Red Rover, Reine de Tulips, Lady Wilmott, &c., which are described as "fine," or "excellent" show flowers, while at the same time their bottoms are admitted to be stained. This is much to be regretted, as many of the clean-bottomed flowers are now quite reasonable, and not at all out of the reach of even the humble amateur. Our competitors here will buy no varieties at all without they have perfectly pure bottoms, for the very powerful reason, that they know they would avail them nothing at the Northumbrian exhibitions; and they who are induced to begin "the fancy," for the sake of a little friendly competition, have far less trouble and far more pleasure in attending to a small, but select, collection of clean varieties, than they would have in growing a larger collection, which would afford no gratification to the scrutinising eyes of the connoisseur.

I beg to apologize for having trespassed so long on your space with this, perhaps diffusive, article; but as it is a favourite subject with me, and as I have not been troublesome of late, perhaps you will bear with me. I have expressed my opinions freely, not with the intention of provoking controversy, but merely to advocate what I consider the best shape for the Tulip, viz.: two-thirds of a hollow ball; and trusting that the inquiry will not be uninteresting to many of the readers of the CABINET, I shall now close this paper, and

> "Resign my weary eyes to the kind nurse of men."

# ARTICLE III.

## ON THE PLEASURES AND ADVANTAGES OF FLORICULTURE.

BY J. HALL, JUN., SHEFFIELD.

> "Not a tree,
> A plant, a leaf, a blossom, but contains
> A folio volume. We may read, and read,
> And read again, and still find something new,
> Something to learn, and something to digest,
> E'en in the humble weed."

As the year advances, and spring once more resumes her seat, bringing along with her "the soft'ning dews, the tender showers," and all the early tokens of reviving nature, what a train of pleasurable thoughts and anticipations crowd upon the mind of the florist. To him every leaf and every bud has a charm and interest; everything is lovely and full of promise; and as he gazes, with rapturous eyes, on the unfolding beauties around him, and watches from day to day the continual disclosures of "Nature's swift and secret-working hand," he is led to exclaim, with the heart-felt gratitude of Thomson,—

> "Come, gentle Spring, ethereal mildness, come!
> And from the bosom of yon dropping cloud,
> While music wakes around, veil'd in a show'r
> Of shadowy roses, on our plains descend."

Thus, joyous and full of hope, he now resumes, in the garden, his favourite and salutary pursuits; now scattering the seed for summer's ripening; now digging and planting, and removing finally for bloom the various ornaments of the parterre; and while he is thus relishing, with eager appetite, the pure and unfeigned pleasures that arise from a floricultural taste, the only source of regret to him is, that other minds and other spirits should not also partake of this enjoyment. The banquet is spread for all, and nature invites to the feast! It is therefore my object, if possible, to encourage the cultivation of this taste, and to recommend floriculture, as a pursuit, worthy the attention of every rational being. I would recommend it—

In the first place, as a rational and innocent amusement. There are few men that have not some favourite pursuit or other—some hobby-horse—with which to fill up leisure moments, and soften down the cares and anxieties of business. Many and various are the expedients which men thus try, to gratify their various tastes and dispositions. Some seek pleasure in the chase, some in the dance, some in one thing, and some in another; and, although harmless and innocent in themselves many of these may be, yet in floriculture, as a pursuit, I claim a superiority and ascendancy over these; inasmuch as it is not only an innocent one, but one that is rational, intellectual, and consistent with the Creator's original design for his creature's happiness. Our first parents, in the days of their innocence and purity, were placed in a garden; and, not only to admire and contemplate its beauties, but, as we read, also "to dress and to till it." From which it is manifest that the flower-garden is a spot intended by the Almighty for man's enjoyment and recreation. And what, indeed, can be more delightful than to study the wondrous laws of Nature, to assist her in her curious and delicate operations, and, by the aid of art, draw out from her those beauties and perfections which would otherwise remain obscure. Another reason of its superiority is that, while other pursuits are but momentary and transient with the season, floriculture is one that can always be enjoyed, always affording sweet reminiscences when past, and pleasant anticipations of the future. We may therefore truly say that "the flower-garden is an endless source of pleasure."

Secondly, I recommend it "as an interesting art and science." The study of floriculture includes in it many most beautiful and delicate arts. We will take, for example, the art of hybridizing,—a process which requires the most exquisite skill and nicety. This is performed by extracting the pollen or dust that is contained in the anthers of one flower, and applying it to the pistil of another. By this means the respective properties of the two flowers become blended, and the seed of the one thus impregnated will produce varieties altogether unique and distinct. There is, likewise, the art of budding and grafting, and various other arts which require equal skill and dexterity in management. It leads us also into science, and that of by no means the least order. The study of botany, the investigation of soils, and the application of manures, all afford scope for the promotion and advancement of science; and such is the progress which, by the aid of chemistry, this science has made, that we can now accurately ascertain what portions of the soil are absorbed by different plants, and therefore what kind of support is necessary to replenish it. By this means every plant may thus have its peculiar food and nourishment. Floriculture is not, then, the mere toy and pastime of a few Dutch boors or Spitalfield weavers, as it was of yore, but an art and a science worthy the attention of every inquiring mind.

And, lastly, I recommend it "as inducing habits of industry, and productive of health and happiness." The continued progress of floriculture, and the encouragement given to it by the formation of floral societies, exhibitions, &c., while they excite the enthusiastic florist to praiseworthy and honourable emulation, also prompt him to the most unwearied industry and perseverance for its accomplishment. His hands are always in employment, and his mind as actively engaged in forethought and providence for the future. Thus habits are early inculcated which will also attend him in all the walks of life.

As to the healthfulness of the pursuit, there is none but will admit it. On this point all doctors agree; for, although fresh air and exercise may be obtained by other means than that of gardening, yet to men of active minds, and particularly men in business, some stimulant—some attraction—is necessary to draw them from the all-engrossing cares of busy life, in order to lead them in the more still and quiet paths of nature. Floriculture furnishes this stimulant; for, while it gives health and recreation to the body, it also affords to the mind new and pleasant subjects to think upon, enlivens the spirits, and produces a cheerful and contented disposition. To the artizan and working man it is especially beneficial; for, while yielding to him a solace and a balm after his hours of daily labour and toil, it at the same time keeps him aloof from those low and debasing practices which so often corrupt the morals of his fellow-mortals. Instead of returning home at night, fierce and besotted from the beer-house, he comes with a cheerful countenance to receive the welcome of a still more smiling wife; and he is thus far a happy man. To those, therefore, that are strangers to this source of happiness and enjoyment, I recommend, for once, the trial of it. Let them try it at its most captivating and propitious season; let them go forth at balmy morn, and behold the beauties of the garden on a morning in spring; let them for once forsake their "falsely-luxurious" ease, and—

> "Springing from the bed of sloth, enjoy
> The cool, the silent, and the fragrant hour."

Then would they, for the first time, exclaim with Milton,—

> "Sweet is the breath of morn! her rising, sweet
> With charm of earliest birds; pleasant the sun,
> When first on this delightful land he spreads
> His orient beams on herb, tree, plant, and flower,
> Glitt'ring with dew."

## ARTICLE IV.

### ON TRENCHING GROUND, IN ORDER TO EXPOSE THE SOIL TO FROST.

BY ARIES, OF TONBRIDGE WELLS.

NOT being aware that the following mode of exposing the soil to the influence of frost has been practised by gardeners, I beg to introduce it to the notice of horticulturists through the medium of your valuable magazine.

In the autumn I dig wide deep trenches, and throw up the earth as high as possible in the middle, thereby leaving on each side a hollow trench. As soon as the first frost has formed a hard crust I throw the soil down into the trench on each side; and this I repeat as often as there is a fresh crust formed by the frost, till the whole has been exposed, when there will be formed two ridges instead of one. By this means I have, even this mild winter, subjected the part of my garden so treated to the frost to a considerable depth, while in the unmoved ground it has never penetrated far below the surface. It will be observed that a continuance of frost is not necessary for the performance of this work, but that every short period of it may be taken advantage of. The labour, besides being done at the least busy time, is very trifling, and is most amply repaid, particularly on stiff soil, by the ease with which it is afterwards worked, owing to its state of division from being mellowed and made friable, every part being exposed to the atmosphere. No plan can more effectually destroy insects or the seeds of weeds.

[This article should have gone in our last number, as intended by our correspondent; but, having been received only four days before the close of February, it was too late to be inserted.—CONDUCTOR.]

# ARTICLE V.

## ON THE PINK.

BY FLORISTA.

The article inserted in the last December Number of the Cabinet was written expressly for the purpose of eliciting the opinions of the cultivators of the Pink, as to what should be considered the requisite qualities of a first rate flower; or, in other words, to give their sentiments as to a standard being adopted, to which all might accede.

I have read the remarks made by Mr. Ibbett in the last Number of the Cabinet, and which, in my opinion, are not in any degree satisfactory. After some uncalled-for observations on anonymous correspondents, he proceeds to say he differs from the assertion I have made, "that the northern and southern florists are at issue on the properties requisite to constitute a first-rate flower;" and in support of his view he states he has for some years supplied Pinks to several cultivators residing in northern counties. Doubtless this is a very gratifying circumstance to him; but I beg to say it is not an answer to my previous statement. I might as well inquire whether he purchased any of the northern Pinks in return, and how the blooms were placed at the flower exhibitions at which he was a competitor; for it is generally known that few of the northern varieties are cultivated in the neighbourhood of the metropolis, and I am inclined to think some cause must be assigned for such a circumstance; yet if it is not on account of the difference of opinion regarding the properties requisite to constitute a first-rate vari ty. I am sure Mr. Ibbett would confer a great obligation by stating how it can be otherwise accounted for. He will further oblige by stating how many of the Pinks sent by him into the northern districts have taken prizes; and particularly whether any southern varieties have been staged at any of the various flower shows held in the following towns in Yorkshire, viz., Sheffield, Leeds, Bradford, Halifax, Wakefield, and Huddersfield—places where the cultivation of this particular flower is carried on to an amazing extent.

I find Mr. Ibbett has not even alluded to the statement I have made regarding the shape of petal-lacing and colour of the northern Pinks being surpassed by any of the southern ones, but proceeds to notice Norman's Henry, which he pronounces a first-rate flower. I believe he will find, on reading the passage again, that my observations were confined to the portrait of this flower; and I again assert that if it be a correct likeness it is a confused and shapeless mass. I beg to refer him to the work in which this portrait is to be found; it is in Wakeling's "Florists and Amateurs' Guide" for the month of July, 1841.

The remarks on my allusion to Garratt's Alpha are very vague, as it is rather a curious coincidence that he has not yet grown a sufficient quantity to enable him to form an opinion upon it, particularly as this is the crack flower of the metropolitan fanciers; and, besides, he professes to grow plants for competitors, who, doubtless, must have had this particular variety in their collections. I observe he admits my remarks, or, as otherwise expressed, attack! on Omega; for I find his statement is, "with all its defects I shall never discard it from my collection."

I was not aware it would have been considered such a responsible undertaking in expressing a candid opinion on the merits of a flower, or in stating by what standard its properties should be defined, or I certainly should have paused before I ventured to solicit Mr. Ibbett's opinion on the subject.

I collect, from the concluding passage of his remarks, that he declines furnishing a descriptive list of flowers, and considers no one capable of expressing an opinion, or laying down any criterion for attaining perfection, but the exhibitors at certain societies in his neighbourhood, and to whose awards and transactions he refers us for the description of the properties of first-rate flowers, overlooking the circumstance that the proceedings of such societies are inaccessible to parties residing hundreds of miles from the places where these exhibitions are held. "Here break we off."

A Midland County, 10th March, 1844.

## ARTICLE VI.

### REMARKS ON THE PINK, &c.'

BY MR. WILLIAM DENT, JUN., OF PRESTON, LANCASHIRE.

I AM sorry to notice so great a want of cordiality in the south country florists towards their brethren in the north, and to observe a specimen of the fact in the reply of Mr. Ibbett to Florista, inserted in the March Number of the CABINET, where he so unjustly attacks the

Lancashire Pink growers. If the growers in this county have not been so fortunate as to have raised Pinks to suit the fancy of Mr. Ibbett, he ought not to condemn them, but rather, as a professed admirer of the Pink, applaud the attempts which have been made in Lancashire; and as he appears to know in what the florists in this part are defective, it would have been a better course of conduct to have given the particulars of the system pursued by the Pink growers of the south. If a more friendly feeling existed amongst the florists, it would greatly tend to promote the advance of floriculture. The culture of flowers is my favourite hobby-horse, and I hope the day is far distant when I shall have to dismount. Mr. Ibbett will, I hope, say if the gentleman he has sent Pinks to for three seasons together is an exhibitor, as we shall then know if it is any criterion to go by; for some gentlemen only fancy Pinks having plenty of petals, without paying any regard to the confused state of the flower. This, I am inclined to think, is the character of most part of the London raised Pinks; at least it is the case of many I have grown. I am this year growing all the pet sorts from the south, amongst which are the following:—Alpha, Model, Dr. Coke, Dean Swift, Champion, Navigator, Henry Creed, President, Ne Plus Ultra, Coronation, Wilmer's Queen, Duke of Wellington, Hodge's 166, Mary Ann, Lady Flora Hastings, Wonder, Gem, Earl of Uxbridge, One in the Ring, Queen Victoria, Nelson's Glory, Prince Albert, Beauty of Cray, Countess of Stanhope, Omega, and several other south Pinks. I have great faults to find with many of them, of which I shall remark in some future CABINET. At the blooming season I intend to make notes of all, and then state my opinions, without being prejudiced to one sort or other.

I beg to inform Florista, the standard by which we judge Pinks in Lancashire is as follows:—The lace to go through to the outer edge of the petal, without being entirely edged with a margin of grey; the moon's pure white, to have the points go well to the shoulder of the petal, without the eye and lace meeting too abrupt, which would cause the moons to be spade shaped, which is a great drawback upon any Pink; the petals thick, edge fine, pod good, and the eye and lace of the same colour. Such flowers are fine to look upon, and I am proud to say that Lancashire florists have raised Pinks which come to the above standard.

# PART II.

## LIST OF NEW AND RARE PLANTS.

**Arctostaphylos pungens.** Pungent Barberry. (Bot. Reg. 17.) Ericaceæ, Decandria Monogynia. A native of Mexico, discovered by Mr. Hartweg, at an elevation of 7000 to 9000 feet above the sea, forming an evergreen shrub six to eight feet high. It is likely to be, in this country, a hardy evergreen, growing about a yard high. It seldom can be kept alive for more than two or three seasons after being raised from seeds, even in pots, unless shaded from mid-day sun during summer. The flowers are produced on short pendant racemes. The blossoms are about the size, and form too, of the Irish heath, of a rosy-pink colour.

**Berberis pallida.** Pale Ash-leaved Barberry. (Bot. Reg. 16.) Berberaceæ, Hexandria Monogynia. This is a new species, from Mexico, from whence Mr. Hartweg has sent seven species. It there forms an evergreen shrub, six feet high. It is of the section termed pinnated, or ash-leaved, with yellow blossoms numerously produced on a looseish raceme near six inches long. Up to the present time it has been grown in a cool pit in the gardens of the London Horticultural Society. It is easily increased, like the other new kinds of Berberis, by grafting in spring or autumn on the common B. aquifolium.

**Bolbophyllum macranthum.** Large-flowered. (Bot. Reg. 13.) Orchidaceæ, Gynandria Monandria. Sent to Messrs. Loddiges's, from Sincapore. The flowers are produced singly, on a footstalk about four inches long. Each blossom is two inches across, the centre is a yellowish green; the rest of it is purple spotted with dark. It blooms in spring.

**Bromheadia palustris.** The Marsh. (Bot. Reg. 18.) The plant has much the appearance of Epidendrum elongatum. The flower spikes have several upon each. The blossoms are about two inches and a-half across, spreading quite open; sepals and petals white. The labellum is straw-coloured in the middle, violet tips, with purple and yellow interspersed.

**Campanula fragilis.** Var. Hirsuta. Hairy fragile Bell Flower. (Pax. Mag. Bot.) Campanulaceæ, Pentandria Monogynia. A very neat and interesting species, a native of Italy, thriving beautifully when grown in the greenhouse, in a sunny situation. It is a compact-growing herbaceous perennial plant, the branches hanging over the sides of the pot, which bloom very profusely. Each blossom is about an inch and a-half across, spreading quite open, and nearly flat, of a beautiful pale blue colour. It is one of the neatest greenhouse ornaments, well deserving cultivation. It may be had at the principal nurseries.

**Disa grandiflora.** Large-flowered. (Bot. Mag. 4073.) Orchidaceæ, Gynandria Monandria. A terrestrial Orchideæ. A native of the Cape of Good Hope, where it is termed the pride of Table Mountain; and Mr. Harvey adds "that every stream is literally bordered with it in the month of March. There the flower-stem rises two feet and a-half high, and each blossom is about five inches across. The sepals a rich red, petals same, very small; labellum red and yellow, with deep crimson veins. The natural situation of growth is on the margin of pools of standing water, the drainage of the boggy slopes of the mountain, where the roots are immersed. These are dry, or nearly so, in summer. It is a splendid flowering plant, well deserving a place in every collection of Cape bulbous and tuberous plants.

**Gladiolus Gandiensis.** The Ghent Corn-flag. (Pax. Mag. Bot.) Iridaceæ, Triandria Monogynia. It is an hybrid, very probably from the G. communis, impregnated with G. pudibundus. The flowers have the openness of the latter, with somewhat of the tints in the colours. The flowers are of a fine crimson-red, with the lower petals, towards their origin, yellow slightly streaked with red. It is a fine flowering variety, highly deserving a situation in every warm part of the flower-garden, or in the open bed of a greenhouse, conservatory, or cool pit-frame. Messrs. Mountjoys, of Ealing, have the plant. Messrs. Rollissons, of Tooting, possess an hybrid of a very similar character, having a little more pale yellow on the lower petals.

HOULLETTIA BROCKLEHURSTIANA. Mr. Brocklehurst's. (Bot. Mag. 4072.) Orchidaceæ, Gynandria Monandria. A native of the Brazils, from whence it was introduced into this country by Mr. Wanklyn, of Crumpsall House, Manchester. It first flowered in Mr. Brocklehurst's collection, at the Fence, near Macclesfield. The flower-stem rises two feet high, terminating in a spiked raceme of six or eight large and most singularly beautiful blossoms. Petals and sepals have the upper half, top portion, of a rich crimson-red, and the lower yellow; all most beautifully spotted and blotched with bright red. Lip yellow spotted with deep purple, sometimes having the terminal lobe almost wholly of a rich purple. The underside of the flowers are of a fawn colour, slightly spotted. Each blossom is nearly three inches across.

NELUMBIUM CASPICUM. Caspian Nelumbium. (Bot. Reg. 14.) Nelumbiaceæ, Polyadelphia Polygynia. It is a stove aquatic plant, in the collection of Messrs. Rollissons. Each blossom is from six to eight inches across, white, with a yellow tinge at the centre, and each petal tipped with rose.

PHASEOLUS LOBATUS. Lobe-leaved Kidney Bean. (Bot. Mag. 4076.) Leguminosæ, Diadelphia Decandria. Mr. Tweedie sent seeds of it from Buenos Ayres to the Glasnevin Botanic Garden. The stem is twining. The flowers are produced in close racemes, yellow.

QUISQUALIS SINENSIS. The Chinese. (Bot. Reg. 15.) Combretaceæ, Decandria Monogynia. It is found in its native state growing about Canton, in China. It is a stove climber, similar to the old Q. indica. The flowers are larger, and of a deep rosy-red colour. It is a very interesting and pretty species. Messrs. Lucombe and Pince, of the Exeter Nursery, possess the plant.

VISCARIA OCULATA. Dark-eyed. (Bot. Mag. 4075.) Caryophylleæ, Decandria Pentagynia. (Synonym Lychnis oculata.) It is a native of the north coast of Africa, seeds of which were received by Messrs. Backhouse, nurserymen, of York. It is said by some to be an annual, by others can be kept a perennial. The plant grows erect, and blooms profusely during several months of summer and autumn. Each blossom is near two inches across, of a beautiful rosy-lilac, having a rich crimson eye. It grows well treated as a hardy annual border flower. It deserves a place in every flower garden.

# PART III.

## MISCELLANEOUS INTELLIGENCE.

### QUERIES.

ON TIGRIDIA PAVONIA.—Having received a few of those bulbs, the Editor of the CABINET will oblige if he will inform me what depth to plant them, and in what soil. Do they require a shady or sunny situation?

Felton, March 13, 1844. ELIZABETH.

[Plant the bulbs so that they be covered about an inch. A rich loamy soil on a dry subsoil suits them. The best situation is a warm but open one, and sheltered from strong winds, or the petals, which are tender, will be damaged. By the early part of October take up the bulbs with a quantity of soil adhering to them; place them so, entire, in a dry situation, where the soil will dry gradually and free from frost or damp. If put in a basket or box it is suitable. Thus kept entire, the bulbs will keep sound.—CONDUCTOR.]

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ON FORCING ROSES IN POTS.—I would be much obliged if you or some of your floricultural friends would give, through the medium of your periodical, the CABINET, an account of what may be the best mode of culture of Roses intended for forcing, from the time they are potted till they are brought into the stove. As I believe this is considered a good time for potting, an early answer will much oblige.

Dublin, March 12, 1844. M. B.

[In the August number of last year's FLORICULTURAL CABINET, there is a long and excellent article on the subject, which we inserted by permission of the writer.—CONDUCTOR.]

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ON THE BIRMINGHAM GIANT COCKSCOMB.—In the CABINET for August, 1842, I see a notice of the "Birmingham Giant Cockscomb." Can you say in your next where seeds of it may be obtained? I have made inquiry both last season and this but without success.

Falkirk. A SUBSCRIBER.

[We can supply our correspondent.—CONDUCTOR.]

ON ZINC LABELS.—Our inquirer (Anon.) may procure the labels of the Zinc cutters, and the ink required be made of the following, viz., water, 10 drachms; verdigris, in powder, 1 drachm; lamp black, in powder, ½ a drachm; sal ammoniac, in powder, 1 drachm.—CONDUCTOR.

## REMARKS.

### LONDON HORTICULTURAL SOCIETY MEETING.

ON February 20, there were exhibited from Mr. J. Brewster, gardener to Mrs. Wray, of Cheltenham, a plant of Lælia superbiens, having a spike about five and a half inches long, of pretty purple blossoms, which, although truly beautiful, were not so well coloured as could have been wished; but it frequently happens that orchidaceous plants fail to produce their first flowers well, and very possibly this may improve in course of cultivation. This plant, the honour of first flowering which belongs to Mrs. Wray, and which has created so much interest, is a native of Guatemala, where it was first discovered by Mr. Skinner —the finest specimens being in ravines, and growing out of the fissures of rocks sheltered from north-west winds. Some of the plants have bulbs 22 inches high, and flower-stems four yards long having 22 flowers. Mr. Hartweg, who also met with it in abundance in the neighbourhood of Chantla, where it is planted by the Indians in front of their doors and exists in immense quantities, says that the length of the stem, being four yards, is uncommon, and that the average number of flowers in clusters is from 7 to 15. A strong plant of this is also in flower in the garden of the Society, growing on a block, where it succeeds well. According to Mr. Skinner, it thrives best in a temperature from 55° to 65°. Mr. Brewster also sent cut flowers of Phycella ignea, a Chilian bulb, having beautiful bright-red flowers; this is not hardy, but might possibly be made to succeed in a dry border, if planted out at an early period, and protected by sand being laid over the surface of the ground, the great fault of bulbs from that quarter being their making an attempt to grow during our winter. From the same collection was also a Cryptandra, having a fragrance somewhat resembling that of a Hawthorn; a large silver medal was awarded for the Lælia superbiens. Mr. J. Robertson, gardener to Mrs. Lawrence, sent Phaius Wallichii, in good condition, having large brown and white blossoms; Oncidium Cavendishianum, that has kept in bloom nearly five weeks; Hippeastrum aulicum, with large red flowers; a variety of Cyrtochilum maculatum, and a large plant of Cymbidium aloifolium. From the same collection were likewise Oncidium reflexum, a Maxillaria, with a pale-coloured blossom; well-grown plants of Dendrobium Wallichii, and D. pulchellum, the latter twining gracefully over a globular trellis, filled with moss. There was also Bletia havanensis, with pretty purple blossoms, and a well-grown plant of the brilliant scarlet-flowered Centradenia rosea, which has the good property of being a very profuse bloomer. Mr. Robertson also sent Begonia manicata, a plant of recent introduction, with pretty flesh-coloured blossoms. This plant, on account of its long white hairs under the leaves, and large brilliant manicate scales, has a curious appearance. Oncidium longifolium was also in the same collection, and a beautiful plant of Epacris variabilis, completely covered with blossom; a Knightian medal was awarded for the three last. From Mr. Kennington, gardener to F. G. Cox, Esq., of Stockwell, was the rare Phalænopsis amabilis, on a block, having very conspicuous large snow-white blossoms. From the same were also Huntleya violacea, Cyrtochilum maculatum, a pretty plant of Phaius intermedius, Bletia Tankervillii, and Brasavola nodosa, with small white and green flowers; a Banksian medal was awarded for the Phalænopsis amabilis. Mr. Gaines, of Battersea, sent for exhibition seven varieties of Camellias. From Mr. W. Scott, gardener to C. Barclay, Esq., was a cut specimen of a flower from a bulb sent from Peru by Mr. Hartweg, having a stem about three feet high, with curious green and red blossoms; a certificate was awarded. From Mr. J. Wells, gardener to W. Wells, Esq , were cut flowers of Camellias, and a fine plant of an Enkianthus, quite covered with pretty flesh-coloured bell-shaped flowers, having considerable resemblance to the old E. quinqueflorus. Mr. Fortune found these shrubs growing in abundance on the mountains of Hong-Kong; a Banksian medal was awarded for the Enkianthus. Mr. J. Plant, gardener to J. H. Schroder, Esq., of Brixton, sent a very large specimen of Epidendrum odoratissimum, having a fine panicle of dingy yellow blossoms; a certificate was awarded. From Mr. Henderson, of Pine-apple-place, was a beautiful small plant of Epacris impressa alba, the pretty Erica mutabilis, remarkable for its long season of flowering; Begonia manicata, B. coccinea, with brilliant scarlet flowers, a beautiful plant of Dendrobium nobile, completely covered with blossoms, and a specimen of Franciscea latifolia, which, besides possessing the agreeable fragrance of F. Hopeana, is a free grower; a Banksian medal was awarded for the two last. Mr. Ayres, gardener to J. Cook, Esq., sent two seedling Cinerarias, one being a bright blue, and the other a purple. From J. Allnut, Esq., was an excellent specimen, in a large pot, of the double white Primula, the leaves of which being of a bright green, were perfectly free from spot, and the flowers were beautifully white; a certificate was awarded. W. Jackson, Esq., of Salcombe, Kingsbridge, Devon, sent specimens of the Seville Orange, Malta Sweet Orange, Shaddock, and Lemons, that had been grown on an east wall, protected only by a glass frame in winter. From the garden of the Society were Dendrobium nobile and cucullatum, Epidendrum macrochilum, Oncidium ensatum, a pretty plant of Phaius grandiflorus; Spiranthes cerina, sent by Mr. Hartweg, and a species of Stenomesson from the same; also plants of Epacris nivalis, E. campanulata alba, and a seedling Epacris, with two pretty plants of the double pink Primula sinensis that were raised from cuttings struck late in autumn. The soil in which they are growing is mixed with superphosphate of lime, which seems to be more beneficial to plants than any substance of a similar nature yet discovered. There were also flowers of Chimonanthus fragrans, grandiflorus, and parviflorus.

On March 5th were exhibited, from S. Rucker, Esq., two exceedingly handsome large-flowered varieties of the Lycaste Skinneri, differing in colour, the one being paler, with a more distinctly marked lip than the other, which was of a deeper purple. Along with these was Phalænopsis amabilis, a plant of great beauty, having a fine bending raceme of large showy white blossoms; also a specimen of Cyrtochilum maculatum, having two pretty spikes of brown and white blossoms; and a plant of Cypripedium barbatum, which considerably resembles venustum. From the same collection was likewise the scarce Galeandra Devoniana, and a cut spike of Coryanthes maculata, curious on account of having its lip gathered up into a kind of bucket, which serves in the economy of the plant to hold a sweet fluid, which slowly drops into it from two processes or secreting glands that are situated immediately above it; a large silver medal was awarded to Mr. Rucker for this collection. Mr. Robertson, gardener to Mrs. Lawrence, sent a well-grown plant of Æschyanthus maculatus, with dark fleshy leaves, among which its numerous clusters of gorgeous scarlet blossoms produced a pretty effect. Also plants of the pretty Schomburgkia undulata and S. crispa, having tall flower-stems bearing rich heads of showy blossoms. From the same collection was likewise a pretty plant of Camarotis purpurea, growing in a basket, and a well-grown specimen of Styphelia tubiflora, a greenhouse plant of a gay graceful appearance; a Knightian medal was awarded for the Schomburgkias, Camarotis, and Styphelia. From Messrs. Rollisson, of Tooting, were beautiful plants of Dendrobium densiflorum and D. Cambridgeanum, the latter with handsome racemes of bright orange blossoms, having a pretty dark velvety spot on the labellum. In the same collection was likewise Phalænopsis amabilis in good condition; also Cœlogyne cristata, a scarce plant, having pretty fragrant blossoms of pure white, except the lip, which, in the centre, is covered with bright yellow fringes; also a beautiful large-flowered variety of Oncidium papilio, much superior to the old one, both in point of size and colour. Messrs. Rollisson likewise sent a variety of Cattleya Mossiæ, a Maxillaria from Guatemala, and a new species of Miltonia from Brazil, having handsome brown and white blossoms; a Knightian medal was awarded for these. Mr. Kennington, gardener to F. Cox, Esq., of Stockwell, exhibited Stanhopea quadricornis, having a fine spike of flowers; Zygopetalum rostratum, Oncidium papilio, and Dendrobium Pierardi, on a block, in good condition. From Messrs. Veitch and Son, of Exeter, was Lycaste Skinneri, and Barbacenia squamata, with red star-like flowers, and a small hard dry foliage, that was lately introduced by Mr. Veitch's collector; a certificate was awarded for it. From Mr. Jackson, of Kingston, was a cut specimen of Inga pulcherrima, a pretty stove plant, having charming tassels of bloom, which are formed by the long crimson filaments. C. B. Warner, Esq., sent a collection of cut flowers, among which were Dendrobium densiflorum, Camarotis purpurea, a Bletia, &c. Mrs. Marryatt sent a cut flower of Schomburgkia marginata, which, although not so showy as others of this genus, is nevertheless pretty. Mr. Glendinning, of Chiswick Nursery, sent a beautiful plant of Eriostemon buxifolius, of which he writes as follows:—"It is one of the prettiest plants we have, and may be forced into flower at any period during the winter months. Its fine dark green foliage, and neat habit, combined with its abundant snow-white, sweet-scented blossoms, render it an object of much interest. It will stand a good deal of forcing without the least injury, and remain in blossom for a considerable period. It is, therefore, a plant not only desirable for summer exhibition, but more especially for decorating the conservatory or drawing-room in winter. Cut sprigs of it are very useful in making bouquets." Mr. Glendinning states that this plant, which is now in good health and covered with bloom, was of small size, growing in a small pot about six months ago, and in bad health, but that one large shift and a higher temperature had brought it to its present healthy and luxuriant state; a Banksian medal was awarded for this. From Mr. Hamp, gardener to J. Thorne, Esq., was a bushy plant of Epacris nivalis, a large specimen of Phaius Tankervillæ, and a small plant of Franciscea Hopeana, along with Erica transparens, which was in good condition.

March 19th.—Mr. Cockburn, gardener to the Earl of Mansfield, at Kenwood, sent bulbs of Oxalis Deppei for the purpose of being distributed. A smaller, and in every respect an inferior kind to this, is generally cultivated for it, which is no doubt one reason why this root is not more in use for culinary purposes. In Belgium it is extensively grown, where not only the tubers but the leaves are also made use of. Respecting its culture, Mr. Cockburn says, "I have grown it for several years, and I am convinced that if a little attention is paid to its cultivation it will be found very useful in the months of October, November, and December; but it would require a longer season of fine weather than our climate affords to bring its tubers to perfect maturity. The bulbs should be potted as early in spring as circumstances will permit, and as they vegetate in a low temperature the pots may be placed in a Peachhouse, greenhouse, or even in a cold frame; but they must not be turned out of doors until all danger of frost is over. They thrive best in a light sandy soil in a southern exposure; the bulbs may be planted from nine to twelve inches apart each way, and should be so arranged that they may be protected from the early frosts of October and November by a slight covering of straw, mats, or spare lights. As eight or ten good tubers are sufficient for a dish, there may be two or three dishes a-week for three or four months, which is no small acquisition to a gardener who has a family at that season to supply with vegetables. Along with these Mr. Cockburn sent for exhibition a tall well-grown specimen of Corræa Harrisii, for which a certificate was awarded. From Mr. Robertson, gardener to Mrs. Lawrence, was a collection of plants, containing handsome specimens of Epidendrum rhizophorum, a rather scarce plant, remarkable for its bright orange-red blossoms; Illicium religiosum, a hardy greenhouse plant with pale green flowers, and somewhat resembling a Spurge Laurel in appearance; Dendrobium secundum, with handsome small racemes of purple flowers: a tall plant of the old Cyrtopodium Andersonii, in excellent condition; also Batemannia Colleyi, Schomburgkia violacea, a good specimen of Cyrtochilum macalatum, remarkable for its fragrance, an Amaryllis, and five pretty plants of Epacris, viz., E. impressa, variabilis, nivalis, attenuata rubra, and a variety of impressa. A Knightian medal was awarded for the first four plants. Mr. Graves, gardener to Mrs. Cannon, sent a bloom of an Epiphyllum from Brazil, which was not different from E. violaceum. From C. B. Warner, Esq., was Camarotis purpurea, an East Indian species, having gracefully drooping racemes of purple blossoms, and a large-flowered variety of Lycaste Skinneri, that was imported late last autumn; the bulbs were at first placed in an Orange-house, and were not exposed to the sun until after roots were formed. The plant was then removed to the cool Orchidaceous-house, where it has since been growing; a certificate was awarded for the former. Mr. Plant, gardener to J. H. Schroder, Esq., sent Vanda cristata, singular on account of the curious form of its flowers; and Oncidium bicornutum, having a fine spike of dingy yellow blossoms; a certificate was awarded for the Vanda cristata. From Mr. Jackson, of Kingston, was a large specimen of Erica Cushiniana, with small purple blossoms; and Morina longiflora, a scarce herbaceous plant, which will grow out of doors, but does better to be kept in a cool frame or in a greenhouse, where, if it is well grown, it produces a stem two feet and a half high, which, when covered with bright crimson blossoms, is rather a striking object. Mr. Crawford, gardener to Mrs. Arabin, sent a cut specimen of Solandra grandiflora, a beautiful hothouse shrub, having large showy white bell-shaped flowers. It was introduced from the West Indies a great many years ago, but on account of the difficulty found in blooming it, it is not generally cultivated. From Mr. Doran, gardener to T. Hawes, Esq., was a brace of straight, well-formed Cucumbers, measuring 19 inches in length; a certificate was awarded for them. From the garden of the Society was a collection of plants, comprising Oncidium ampliatum, both the small and large variety; they were sent from Guatemala by Mr. Hartweg, and are both one species, but differ in the size of the flowers, the one being much larger than the other. It is one of the many instances in which Orchidaceæ differ in this respect; it seems to be a general disposition among them, for plants of the same species to produce flowers different in size, while in other respects they are not dissimilar. In the same collection were likewise Dendrobium Heyneanum, Epidendrum Stamfordianum, Lycaste Cruenta, Franciscea Hopeana, Euphorbia melanthera, and three Cinerarias, viz., Fanny Tripet, Urania, and Unique; the first had been drained with charcoal, the second had been top-dressed with the same material, and the third, besides being top-dressed with charcoal, received one teaspoonful of Harris's liquid manure in a pint of water, on the 5th of February. With these differences, the plants were treated in every respect the same. The first was the smallest, and the leaves were of a pale yellow green; the second was larger, and the foliage was of a deeper shade; the third, being the one that had received the liquid manure, in addition to the top-dressing of charcoal, was the largest, and the leaves were of a very healthy dark green; but that this results from the use of the liquid manure is not perfectly ascertained. Along with these were cut flowers of Camellia Colvillii, imbricata, and Reevesiana; and also of Acacia pubescens, and Riceana.

Woodlice.—Where the pits of stoves, frames, &c., are infested with woodlice, boiling water poured over the bark, soil, leaves, or into crevices, speedily exterminates the race.

Stockton. JAMES HAMILTON.

On destroying the Brown Scale.—Euphorbias, Cinnamon, Lemon, Orange-trees, &c., are often pestered with the brown scale. If the plants be sponged or syringed in every part with a strong infusion of chamomile, it will speedily rid them of the pest. Experience enables me to assert it. It is easily done, and does not in the least injure any plant on which it is applied.

Flora.

On the One-shift System of Potting.—Being desirous to realise the benefits of the one-shift system of potting, and to avoid, if possible, the destruction of some delicate kinds of Heaths and a scarlet Epacris I had bought for 63s., it struck me the best plan would be to put inside the large pot a less one, upside down; upon this to place the ball of the plant, the surface of which will be as high as the rim. This keeps the main body of the roots from excessive wet, and the ball will not sink too low in the pot afterwards, and thus be liable to excess of moisture. My plants succeeded admirably, and now are very healthy.

Guildford, March 4, 1844. A Flower Gardener.

## FLORICULTURAL CALENDAR FOR APRIL.

Amaryllises, and other liliaceous bulbous plants which have been kept dormant, may now be re-potted, and put into an increased temperature.

Annuals, Hardy, such as Clarkias, Nemophilas, Larkspurs, &c.—If the soil be moderately dry, some of the most hardy kinds, to bloom early in the summer, may be sown in warm parts of the country, or situations well protected, but in cold places, not until the end of the month; for if the seeds of many sorts begin to vegetate, and frost operate upon them, they are often destroyed. The best method of sowing the small seeds in patches is to have a quantity of finely sifted soil; spread a portion where desired; after scattering the seeds, sprinkle a little more soil over them, and then press it closely upon the seeds, which will assist them in vegetating properly.

Annuals, Tender, such as Cockscombs, Balsams, Stocks, &c.—Such as have been sown and may be up, should have all possible air given to prevent their being drawn up weakly. In watering those in pots they must not be watered over the tops, or many of the sorts will be rotted by it. The best method is to flood over the surface of each pot, always using water that is new-milk-warm. Those annuals sown in frames must be watered (when requisite) with a very fine syringe, or pan rose to sprinkle with; but the best plan is to take advantage of gentle rains. For any seeds yet requiring to be sown, use fine soil pressed to the seeds, and when convenient, place the pots (if used) in moist heat till the plants are up. Cockscombs, Amaranthus, Balsam, Browallia, Brachycoma, Thunbergias, Maurandias, &c., if large enough to pot, should be done in sixty sized pots.

Auriculas.—Those requiring top-dressing should be done immediately, by taking off about two inches deep of the top soil, replacing it with some very rich; more than one-half of it should be rotten cow-dung two years old, and the rest loam and sand. Immediately after this dressing, let the soil be well settled by a free watering. By the end of the month the unexpanded blossoms will be nearly full grown; no water must be allowed to fall on them, or the blossoms would be liable to suffer injury by it. All possible air may be admitted to the plants during the day, only screen from cutting frosty winds.

Campanula pyramidalis—to have fine pot specimens should be potted, if not before done, and encouraged to grow.

Carnations—at the end of the month, the last year's layers kept in pots or beds during the winter should be planted off into large pots 12 inches wide at the top, 6 at the bottom, and 10 deep. In each pot three plants may be placed triangularly, not planting deeper than to fix them securely. The following compost is most suitable:—Two barrows full of fresh yellow loam, three of well-rotted horse-dung, and half a barrowful of river sand, well mixed; plant in it *without sifting*, but breaking very well with the spade, and have a free drainage of rough turf, &c.; place the plants in a sheltered situation out of doors.

Creepers, and twining greenhouse or hardy plants, should be pruned and regulated before they begin to grow, where growing early attention to training and thinning should be given.

Calceolaria Seed should be sown early in the month, having the finest sifted soil for the surface. Offsets root rapidly now, and should be potted off.

Chrysanthemums—sow seed of, and raise in moist heat. Mind the suckers of old plants are not drawn up; admit duly of air. Pot off suckers for next blooming.

Commellina tubers and Tigridia bulbs should now be planted.

Cuttings of Salvias, Fuchsias, Heliotropes, Geraniums, Celsias, Alonsoas, Lotuses, Senecios, &c., where it is desired to plant such out in beds, should be struck in moist heat as early as possible. Young shoots, cut off clean, strike readily. (See kinds of plants suitable, in vol. i. p. 38, and for additional kinds, subsequent vols.) Pot into small pots any struck to give vigour to them to be better suited for turning out in May.

Dahlias, if not already put into excitement, should be done as early as possible. Seeds should also be sown, placing them in a hot-bed frame till up. Cuttings be taken off and struck in heat. Pot off struck cuttings.

Achimenes, Gesneria, Gloxinia, and Tropæolum bulbs, &c., that have been kept dry during winter, should now be potted, and gently brought forward in heat.

Herbaceous perennials, biennials. &c., should now be divided, if required.

Hydrangeas.—Cuttings may now be taken off, cutting off the tops of any shoots that have very plump leading buds about one inch below the bud of each cutting. These inserted, each into a small pot, and placed in moist heat, will soon strike root, and will, with future proper treatment, bloom one fine head each, strikingly beautiful. To make them bloom blue, use charcoal (see last Number thereon

Pansies divide successfully now, the shoots root freely at the undersides.

Pelargoniums.—Cuttings now put in, struck in a hot-bed frame, and potted off as soon as they have taken root, will bloom during autumn.

Polyanthuses should now be top-dressed, as directed for Auriculas, only the soil need not be so rich. Seed may now be sown; the best method is to raise it in heat, harden gradually, and transplant when large enough. Offsets may be removed, or plants divided, if an increase is desired.

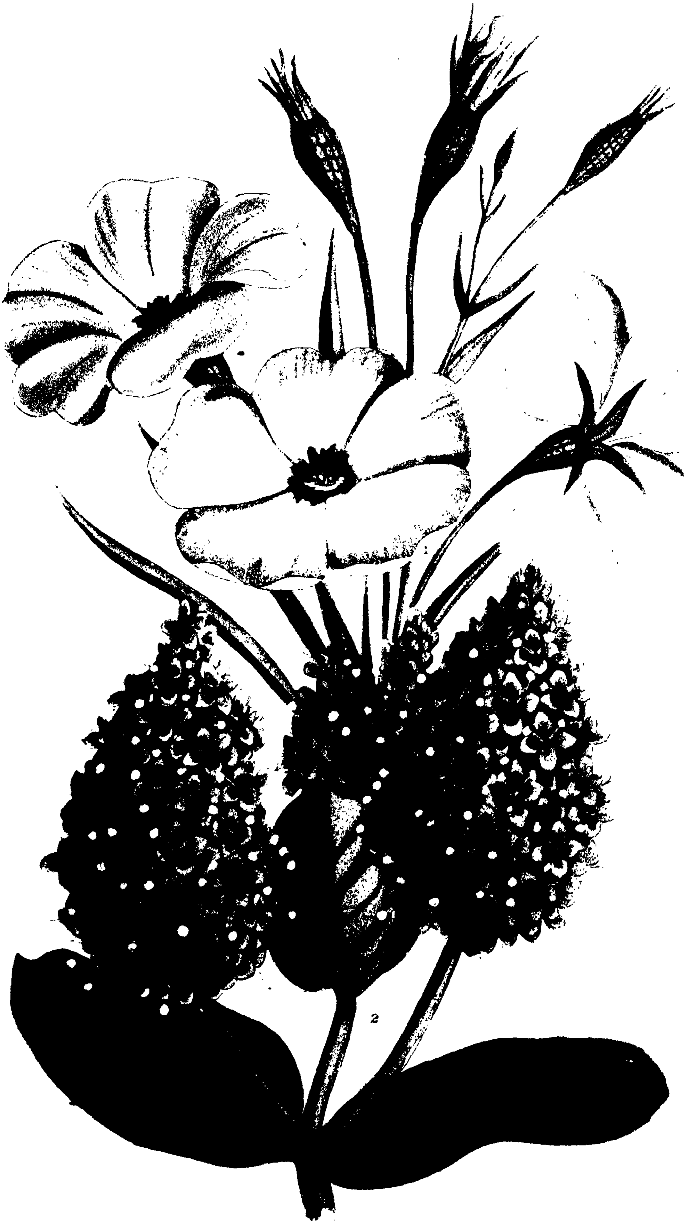
Ranunculuses and Anemones should now be planted, taking care no fresh applied dung is in the soil, nor should the ground to plant in be lightened up more than two inches deep. The soil of the bed should be half a yard deep at the least. The best roots for flowering are such as have the crowns high and firm, with regular placed claws. Another bed, planted a fortnight later, brings them into bloom, so as to assist a florist to select for a show. Protect from excess of rain.

Rose Trees not yet pruned, if allowed to remain untouched till the shoots of the present coming season be about an inch long, and be then shortened by cutting back all the old wood to below where the new shoots had pushed, the dormant buds will then be excited, and roses will be produced some weeks later than if pruned at a much earlier season. Plants in pots now put into heat will come into bloom in May.

Tuberoses should be planted, one root in a small pot, using very rich sandy soil; the pots should be placed in moist heat till the plants are up a few inches, then they may be planted into larger pots, and taken into a stove, and finally into a greenhouse.

Tulips.—At this season such as happen to be affected with canker will appear sickly; the roots should be examined, and the damaged part be cut clean out. If left exposed to sun and air, the parts will soon dry and heal. Avoid frosty air getting to the wound by exposure. Protect from excess of rain.

Seeds of greenhouse and similar plants may now successfully be sown, raised in moist temperature.



1 Viscària oculata 2 Verónica speciosa

# THE

# FLORICULTURAL CABINET,

MAY 1st, 1844.

## PART I.

## EMBELLISHMENTS.

### ARTICLE I.

### 1. VERONICA SPECIOSA. SHOWY SPEEDWELL.

This very handsome shrubby Veronica is a native of New Zealand; its native locality is near the mouth of the Hokianga river. It was first received in this country by Mr. Knight, of the King's-road, Chelsea, where we saw a considerable stock of fine plants. In its native country, it grows to a robust shrub, from a yard to two yards high. The plants at Mr. Knight's are about half a yard high, each forming a clean and compact shrub, somewhat in appearance to a vigorous plant of Lisianthus Russellianus.

It is considered to be about as hardy as Clianthus puniceus, but it has been kept at Mr. Knight's in a cool greenhouse. Plants may also be had at the extensive nursery establishments, as Mr. Low, of Clapton, &c.

It deserves a place in every greenhouse or conservatory, where it would form a very ornamental object, and, being an evergreen, with bold shining green foliage, it looks well even without a flower.

### 2. VISCARIA OCULATA. Dark Eyed.

(Synonym Lychnis Oculata.)

A native of the north coast of Africa, from whence seeds were recently received by Messrs. Backhouses', Nurserymen, of York. It is a hardy annual, and may be treated in the usual way of such annuals, either sown in pots in autumn, be kept in a cool frame through winter and planted out entire in spring, or be sown in the open border in February. It continues to bloom during the whole of summer and autumn. It well deserves a place in every flower-border.

Seeds may be obtained of Messrs. Backhouses, and other general seedsmen.

## ARTICLE II.

### REMARKS ON THE TANK SYSTEM OF HEATING,

BY C. C., OF SOMERSET.

In accordance with my promise, I now forward some observations on the tank system of heating, the result of experience which has recently occurred.

I noticed some remarks made, in the March Cabinet, by a person who signs himself a Practical Man, on this mode of heating, and in some respects I agree with his opinions; but I beg to state, that every intelligent person knows, whatever plan of heating is adopted for the growth of exotics, if it be not properly managed it must certainly fail. I can assure the readers of the Cabinet, that where the tank is properly constructed, &c., the result will be most satisfactory. My experience enables me, with the utmost confidence, to offer the following particulars to their notice.

The bottom of the tank should be supported on arches or pillars, and not be upon an entire solid mass, the water retains and distributes its heat more constant and copious, also with less expense in fuel, than it would if on an entire solid base.

It is also beneficial to have a fire flue constructed along the front of the house, so that, if required, any excess of moisture might be dried up, whilst a due temperature too could thus be afforded to any desired extent. A house provided with the means of heating thus specified, could be heated to a very high temperature in a short space of time, and the heat be easily and regularly retained. Such a house would be, as far as its heating the area is concerned, all that could be desired for the growth of Orchideous plants, and in fact all moist hothouse ones. I advise the use of Stevenson's boiler, it not only requires a very small portion of fuel but is very effectual in every other point.

In supplying bottom heat to a pit, in which plants, cuttings, &c.,

are plunged or grown, the tank of course must be placed level, and the upper part be covered with bricks, leaving passages about two inches wide leading to the front and back of the bed. Tubes must also be placed through the soil, so as to allow the heat to be conveyed from the chamber beneath to above the surface of the earth, or other material. When the arches or pillars upon which the bottom of the tank, if it be of copper or other metal, is to be placed, are built, spread a layer of slates extending the length of the tank, upon which spread a thin layer of sand in order to have the tank laid perfectly level. If the tank be formed of slates or similar material, the layer of sand will not be required. It is advisable to have a fire-flue constructed along the front of the chamber, so that when dry heat is required, it could be made available. A few open places should be left along the front of the bed to allow it to pass from beneath to the space above. In order to form a basis for the earth, or other material, it can easily be done with slates; upon them place a layer of good coal-ashes mortar, and on it spread brick-bats, not broken into small fragments, but as such usually are to be had at the brick-yard, about four inches deep; over these lay some spray sticks, in order to prevent the soil, &c., from running down amongst the broken bricks.

I have seen several pits constructed in this manner, in which Pine and other plants were grown in the greatest luxuriance. There is not an excess of moisture in the soil, &c., neither in the surface temperature, but it is in a perfectly congenial state. Another valuable point is provided for, the temperature is always so readily at command.

## ARTICLE III.

### REMARKS ON VERANDAHS, FOR PLANTS, &c.

BY FLORA.

I AM of opinion that, for cottage or villa residences, no species of greenhouse, so far as convenience is concerned, has more advantages than a structure in the verandah fashion, that is, a covered projection, having a glazed front, and the roof wholly or in part of the same material. I have noticed several which have very recently been erected in the environs of London. Such a structure may be placed against the front or one or more ends of the dwelling-house, the principal windows opening into it in the French manner, and the plants will require to be selected, and their arrangement made subordinate to the circumstances of the case.

Such an erection will answer the purpose of an agreeable lounge or promenade, which cannot fail to render them very desirable to the valetudinarian at all seasons, and to the young and active in times of rain and bad weather: it will also serve as a repository for exotic flowering plants; and if some taste be displayed in the management and arrangement of them, they will produce a very pleasing effect. In the disposal of plants in such houses, we would direct particular attention to be paid to a judicious selection of choice free-flowering climbers, to be planted in spaces prepared for them under the floor, and to be trained up the front pilasters and under the rafters of the roof. The spaces for these plants need not be more than chambers, formed of about two feet by three, and eighteen inches deep, filled with good peat and loam, in which most plants of this description will grow freely. A space of a semi-circular form should be left in the pavement to receive the plant, and also to supply water to it; this space need not be larger than about nine inches in length by six in its greatest breadth; and the opening should have a neat ornamental iron guard placed round it, about four inches in height, to prevent the stem of the plant from being injured or broken.

Presuming that the floor is paved, elegant stages or flower stands should be tastefully arranged, and rendered portable by being mounted upon castors; but their arrangement and position may be altered, at the pleasure of the proprietor, so as to bring the plants into the light and shade, as their habits and other circumstances may require. On these stages or stands the smaller plants are to be placed.

Large and fine specimens should be placed in vases, which of themselves are ornaments for such a situation, if tastefully chosen. These vases are manufactured by Mr. Austin, of the New Road, London, at his artificial stone manufactory, and are both cheap and durable.

In structures of this kind, strict attention to the architectural style of the dwelling should be by no means disregarded. It would be incongruous and absurd to see a Doric, Corinthian, or Gothic building, to which a verandah or greenhouse of any other order were appended, yet such instances of bad taste are often seen. Architectural decoration, however, must not be carried too far, particularly where it has the effect of excluding the light. There can, however, be no objection to the pilasters between the front sashes being so constructed as to show the style of architecture to which they belong. In regard to the dimensions of such houses, they should, under few circumstances, be of less length than that of the front of the house against which they are placed, and indeed of which they may be said to form a part: their height and width must always be governed by circumstances. If a sloping roof be adopted, it cannot be higher than the sill of the windows of the rooms immediately above it; the width then must be contracted to allow of sufficient fall for the water to run off, as the front or upright sashes should not be less than eight feet in height. To obviate this difficulty, and to increase the width, a curvilinear, or span roof, may be adopted, the centre or ridge of which may be, without objection, a foot or two above the level of the sill of the first-floor windows, because it will be sufficiently distant to prevent the view from being interrupted, or the rooms from being darkened.

Such structures are, however, better adapted for the display of flowering plants and fine specimens already grown to perfection, than for the more delicate process of rearing them from seeds, cuttings, &c. Such a house as I am now alluding to should present at all times a perfect whole. The very changing of the plants, when going out of flower, or the introduction of such as are coming into bloom, should be conducted early in the morning, or when the family is from home, or gone out, so that no appearance of disorder or confusion may be observed. Of course, in this case, I allude to families of distinction and fashion. The more humble, yet no less zealous amateur, may take delight in conducting these arrangements personally, and derive as much pleasure from the contemplation of his own handiwork as his more opulent and luxurious neighbour in viewing that which is prepared for him.

To maintain a regular supply for a house of this description, when it is intended to be kept in the first degree of elegance and perfection, it will be necessary to have recourse elsewhere, and this can easily be accomplished, either by purchasing from the nurserymen, or by growing plants in a pit or greenhouse, in the same garden. There are certain plants that may be kept in the verandah at all periods, and indeed they form one of the principal features in this style of greenhouse, namely, Camellias, Oranges, Pittisporums, Magnolias

Rhododendrons, large and grotesque specimens of succulent plants, &c.; and these, with a judicious selection of fine-flowering climbing plants, must always constitute the chief furniture of such a structure. The minor decorations may consist of Geraniums, Helitropeums, Fuchsias, Roses, Calceolarias, the harder and free-flowering Ericæ, and other fine-flowering plants that are to be brought in, in succession, so as to keep the verandah at all time in a full-flowering state.

With the addition of a small brick pit of six or eight lights in length, having a flue in it to exclude frost, and divided in the middle, so that one end may be kept rather warmer than the other, all the plants above enumerated, and many more, may be grown in great perfection, so as to be brought in while in flower to decorate the verandah, and at little trouble or expense, and within the means of almost every person who occupies a house in the villa or cottage style.

It would be useless to attempt to give directions that would be generally applicable to all houses of this sort; suffice it to say, that after having disposed of the large specimens of plants, so as to produce the most pleasing effect in the mind of the owner, the smaller ones may be tastefully arranged on pedestals, ornamental flower baskets, and in a variety of ways that would give effect to the whole. It should, however, be observed, that the nearer to the light and glass that all small-leaved plants are placed the better: the thicker and larger-leaved plants, such as Oranges, Camellias, Hydrangeas, &c., and most succulent plants, excepting the genus Mesembryanthemum, may be placed at a greater distance from the light.

In regard to heating the verandah, it should be by means of flues or hot-water pipes, placed under the level of the floor, the heat ascending from them into the house through ornamental metallic plates, let into the pavement immediately over them, or, as the object is to repel frost only during the winter, an elegant German stove may be placed near one end, having its smoke-conducting pipes stretching out towards the other extremity. The whole expense of such a stove for a small house would not exceed five or ten pounds, and it may be used for many purposes when not in use in the verandah, which will in few seasons be longer than from the beginning of December to the middle or end of February.

Great caution ought to be observed to prevent such stoves from becoming too hot, and also that they be placed sufficiently distant from the plants. A novel and economical method of heating such houses, and, indeed, most small greenhouses, would be to place on the top of a German stove a small boiler, placed in the centre of the house, and having the stove so constructed as to allow the smoke to escape under the floor, as is the usual manner in similar stoves used for heating halls, lobbies, &c. From this boiler a pipe should branch off from the right hand, and another from the left, and be carried to any required distance, where they should make a turn, and again enter the boiler. Such an apparatus, being portable, could be removed when not required, and used for a variety of domestic purposes, particularly in a laundry for drying linen, or a harness room for repelling damp, and a variety of other purposes that the ingenuity of the proprietor might suggest.

Verandahs, like greenhouses, conservatories, &c., may be conveniently heated, if placed over cellars or other underground apartments, by having a regular hot-water boiler placed in them, with a conducting pipe rising from its top (which of course must be a fixed one), which would conduct the hot water into a horizontal pipe, placed in a cavity under the floor, and extending to the end of the house, and either made to return under itself or to make the circuit of the house, and again re-enter the boiler near its bottom. It is of no consequence how deep the cellar may be, or how high above it the house to be heated may be placed. However, that as little waste of caloric as possible may take place, we should recommend the perpendicular pipe to be covered with coarse canvass or sacking, or any other non-conducting substance.

Neither is it essentially necessary that the boiler be placed directly under the verandah, &c., for if the pipes be covered as above, or enclosed in a wooden case and packed in saw-dust, they may be carried a considerable distance in a slanting or even horizontal position, so long as they are kept above the level of the boiler.

I have seen many dwelling houses heated by means of hot water, the boiler, &c., being placed in the cellar, or in a chamber constructed on purpose, a niche in the side of a passage, or other more convenient place; when such is the case, a branch pipe is readily conducted to the verandah, and the supply of hot water cut off or let on by means of Kewley's water-cock, as may be required.

# ARTICLE IV.

## REMARKS ON POLYANTHUSES.

BY MR. GEORGE HUDSON.

REPLYING to the inquiries of Mr. W. Harrison, of Felton Bridge, in your last number, respecting my seedling Polyanthuses, I beg to observe that I entirely coincide in his observations as to the room for improvement in this class of flowers.

I shall not presume to assert that any of my seedlings possess *all* the qualifications laid down as constituting perfection, although I am convinced they are decidedly in advance of many sorts generally cultivated and competing successfully at different exhibitions.

I have at various times raised exceedingly promising seedlings, but (with the exception of what I am now sending out) I have been unfortunate with them; my garden being situated in a warm aspect, the heat during the summer months has generally destroyed them; I am in hopes, however, of guarding against similar failures for the future.

In sending out the present lot I determined upon fixing such a price as might place them within the reach of florists generally, and also give satisfaction, which I feel pretty confident they will do.

Not being a member of any society where a spring show is held, I have never staged them for competition; but they have been inspected by several Nottinghamshire florists, who pronounced favourably on their merits,—Negro Boy, in particular, has received general commendation. In compliance with Mr. H.'s request, I add a brief description of each.

Kegworth, Leicestershire, December 18, 1843.

NEGRO BOY.—Very dark ground colour, laced with a rich deep yellow; the thrums well up in the tube, and rises full in the centre, in the style of Pearson's Alexander, but a much more constant lacer.

LADY LINCOLN.—I raised this variety from Hufton's Lord Lincoln, which it resembles in colour, but attains a greater size and is a much better grower. It will be a decided acquisition to the dark-grounded class.

LADY GREY.—A dark ground, in the style of Hufton's Earl Grey, from which I have no doubt it was raised. Is a true lacer, good form, and an excellent grower.

**Red Rover.**—Is a red ground, of good shape, and different in character from any other that I am acquainted with. It is not so constant in its lacing as the preceding sorts, but a desirable variety to cultivate.

## ARTICLE V.

### ON INCREASING PLANTS OF THE CACTUS TRIBE.

BY AN ARDENT AMATEUR GROWER, OF STOCKWELL, NEAR LONDON.

The art of propagating Cacteæ has made such rapid progress in modern times, that sorts of which there had only been single specimens in few collections for many years, are now propagated, and will soon be obtainable by amateurs; but, as the best modes of increase are not generally known, I transmit the following particulars for insertion in the Floricultural Cabinet, to extend the knowledge to all admirers of this interesting tribe. The Melocactuses only cannot be subjected to the common rule, and are almost always propagated by seed, whereby it sometimes happens that degenerations take place. All other Cacteæ may be cut in two, at the proper season, without danger; and, when potted with care, it is generally the case that the cut-off piece forms a better specimen than the mutilated one was. Mammillarias and Echinocactuses, scarcely the size of a walnut, are fit for making cuttings, and grow with more ease and certainty at this time. In the same way, even the oldest plants succeed; for example, Cereuses, with an axis of wood from one to two inches in diameter; in short, it is a generally practicable proceeding, and yet requires some care. Echinocactuses and Cereuses shoot out generally from the knots, where the spines are; Mammillarias, on the contrary, shoot from between the teats, sometimes out of the teats themselves. These shoots may be taken off very soon; and, the smaller they are, the sooner they will be found to root. The same way of propagating may be adopted for Lepismiums, Rhipsalises, and Pereskias. Epiphyllums, Hariolas, and Opuntias are easily propagated by separating and taking off one or two articulations in the joints.

Each part of a Cactus intended to form a new plant, whether it be a cut-off head or a taken-off shoot, must, according to the different state of the weather, lie from one to eight days exposed, if possible, to the sun, to dry the cut completely. I never found it necessary to powder with coal-powder or brickdust, and but very seldom lost a cutting or taken-off head, except when the weather, immediately after cutting, became dull and wet for a long time. I even cannot believe that the striking of the cuttings will be advanced by plunging the pots into a hot-pit; on the contrary, the surest method appears to me to be to expose the newly-potted cuttings to a most concentrated sun-heat, by placing them under a sloping light of the greenhouse; and it does no harm, although the pots get so hot that they can scarcely be touched.

When the cuttings are duly dry, they must be potted into as small pots as possible, and the same cautions I mentioned when speaking of re-potting well observed. Some put cuttings into somewhat moist soil, and let them stand for a fortnight without watering; but I always plunge the pots of my cuttings, immediately after potting, once into water, and keep them in it till they are completely saturated; after which I let them stand for twenty-four hours in the shade. I then bring them to the sun, not watering at all till all the mould is completely dry. Which of these methods is the better I do not know; the first may, perhaps, be the surest in doubtful weather and an advanced season; but the latter, at all events, will lead soonest to the purpose. Besides, I have tried, as an experiment, to take cuttings of several Cacteæ last winter. I potted them about Christmas; and, after a good plunging into water, placed the pots upon a heated stove, where they soon got dry, and, by a good daily supply of water, began to strike roots in the course of about a week.

It is of great importance for imported Cacteæ, to cut off all the roots, though healthy and strong-looking, and to clear off whatever is withered and soft about the plant itself, and cannot be loosened with the fingers, with a sharp knife, without bruising. They must then be left lying for some time, and the cut exposed as much as possible to the sun. When these precautionary measures are not taken, the plant will get rotten from below, and must be put into greater danger, by cutting into the healthy flesh, than it can incur when put into the soil with a dry and healed-up stump; and, although it may happen that no rotting takes place, it is sometimes the case that the plants will stand for several years without growing in the least, it being more difficult for young roots to shoot out from the remaining portions of the old roots than out of the body of the plant itself.

To graft Cacteæ is not very difficult; and, though it may appear a mere play, it is not quite that, as there are many sorts of this kind of plants which may be more easily flowered by this method than by any other; and if we continue these experiments, we may, perhaps, obtain many new flowers. I succeed best in grafting joints of Epiphyllum truncatum, E. Altensteinii, or even Cereus phyllanthöides, upon the stem of Opuntia brasiliensis, the top of which has been cut off; and I get, by such means, plants of surprising beauty, which distinguish themselves by their luxuriant growth and profusion of flowers. Even slender branches of several Cereuses will grow easily upon fleshy Opuntias, and the process itself is quite a simple one. Take the cutting off somewhat pointed on the lower end, and shove it, freshly cut, into the cut or hole of the plant upon which it is to be grafted, and wind a woollen thread not too firmly round it; or, if that should not be easily managed, I close the place by plastering grafting-wax over it. When it succeeds, so close a union soon takes place that the graft seems to be a part of the plant itself. The growing of the graft, however, is no proof of the success of the operation, for it often happens that, notwithstanding its growth, no such joining has taken place; and the consequence is that, sooner or later, the graft withers, though sometimes not before one or two years.

The propagation of Cacteæ by seed is, for many sorts, of great value; and, whenever I have seed, I am pretty sure to succeed. I annually get ripe seed in abundance, of a great many sorts, without the least trouble; as of Mammillaria pusilla and simplex, Echinocactus Ottonis, Cereus flagelliformis, and a great many of the Opuntias. But these, unfortunately, are sorts which, to grow slowly from seed, are of but little or no interest, because we can get them much faster by cuttings. Seeds of some sorts can only be got but by a careful and artificial impregnation. For this purpose, I take the pollen from a completely unfolded flower with a soft and clean camel-hair brush, and brush it, without force, either upon the stigma of the same flower, or, when it is wished to produce hybrids, upon that of another sort. By these means I get fruits with ripe seeds fit for sowing. Besides, I am sometimes so lucky as to find ripe fruits on newly-imported specimens; and it is of great consequence that persons who get such plants from their native countries should carefully examine the living ones of new forms, as well as those that happen to be dead, to see whether they can find any seed on or about them. It has already happened that some unique specimens in Europe have been saved by carefully collecting and sowing both the remainders of the plants and the dust and dregs of the box.

For sowing, small pots are used, filled with a loose sandy mould, watered previously to sowing. The seed is then strewed over the surface, and either sparingly covered, or not, with some very fine mould or sand; then covered with a pane of glass, and placed either in a hot frame, or below a sloping light in a warm situation. Cactus seeds retain their vitality for several years, and spring generally in about ten or fourteen days after sowing. As soon as the young plants appear, they must be secured against too burning heat of the sun, and potted as soon as possible, either singly or from three to four together, in very small pots. The most dangerous enemies to them are the woodlice, which are very partial to the young and tender plants. In their haunts I have poured boiling water; this speedily exterminates the race. When red spider attacks, a sprinkling of common sulphur settles with them; and, when the brown scale infests them, a sprinkling over with a strong infusion of chamomile destroys them.

## ARTICLE VI.

### REMARKS ON THE DISTINGUISHING PECULIARITIES OF THE VARIOUS CLASSES OF ROSES, &c.

**Rosa damascena, Damask Roses.**—This section, and the Albas, contain some of the finest light roses, or blush roses, grown. The true Damasks may be generally known by their rough spiny shoots and leaves; the capsules, or seed-vessels, are mostly very rough or spiny, and the flowers are very sweet.

**Rosa centifolia muscosa, Moss Roses.**—An elegant family, a division of the section Centifolia, or hundred-leaved, being only a sporl from it, the moss being the criterion; blooms once in the season. They require a light rich soil when grown on their own roots, in cold soils worked on the Dog Rose, and close pruning.

**Rosa centifolia, Provence, or Cabbage,** of the English, **Cent-feuilles** (100 leaves) of the French.—The term one hundred-leaved does not refer to the foliage, but to the petals of the flowers. The flowers are all globular in form, and on long footstalks, so that they hang gracefully pendant, and are readily distinguished from all others. They are very fragrant. In light soils they grow best when on their own roots, but in strong clayey soils they do best when worked on the Dog Rose. They require close cutting in when pruned, even to three or four buds, and early in winter a good top-dressing of rotten manure.

Portland, or Perpetuals, and Hybrids of Perpetuals, called Bourbons.—This class is the most desirable of Roses, and all true perpetuals have a terminal cluster of flowers. They continue in bloom longer than any other section. They are mostly Damasks, or hybrids from the Damask. The blooming in autumn, that is to say, from the beginning of August to the end of the season, renders this class very distinctive, as well as the clusters of flowers. Most of them are very fragrant. By attention to pruning in November, and again early in June, cutting back one-half of the shoots which have pushed, they can be made to bloom from June to the end of the season. Perpetual Roses require an abundance of food, and an application to the surface of well-rotted dung, just covered with the soil, every autumn, is essential to success. The Hybrid Bourbons, or Hybrid Perpetuals, partake of the hardiness and fragrance of the Damask rose, blooming very abundantly in Autumn.

Rosa alba, White Rose, or Belgic, and their Hybrids.—This section is easily known by their clear green shoots, and the leaves being of a glaucous green, looking as if dusted over with a greyish powder. The plant has few spines, and is compact in growth. They always bloom abundantly, and require close pruning.

Rosa Gallica, the French Rose.—This section contains most of our old garden Roses; they are robust and hardy, stiff and erect growers; their compact growth recommends them as very suitable for dwarf standards. The flowers are mostly very full and finely formed, and contain many beautiful striped and spotted ones. The flowers of this section are very regular in formation, and it is very likely that it will be the favourite of florists who show for prizes in the manner Dahlias are now exhibited. To have the flowers large, the buds should be thinned early in June, manure be laid over the surface and sprinkled over with soil, and if watered in dry summers with manure water it very much invigorates them.

ROSA BOURBONIANA, the BOURBON ROSE.—Of this section it is stated, that "at the Isle of Bourbon, the inhabitants generally inclose their land with hedges made of two rows of roses, one row of the common China Rose, the other of the four seasons, the only two sorts grown in the island. Monsieur Perichon, as proprietor at Saint Benoist, in the isle, in planting one of these hedges, found amongst his young plants one very different from the others in its foliage and shoots; he planted it in his garden, and it proved to be quite a new rose. This, with all the fine hybrids, form, amongst the Indica Roses, what the Perpetuals do amongst the Gallicas. They are free and continual bloomers, bright colours, fine form, deep green foliage, free growers, though close and compact. Some of them are fine as climbers. They seem to do well in any soil of a moderate quality. The flowers have a delicious fragrance, particularly in the autumn; they ought to have a place in every autumnal Rose garden, whether as standards, dwarfs, or pillars, and in all will certainly please. They do not require much pruning, but at the end of March to have the shoots thinned, and to cut back those left to about five buds. Dwarf standards grown in pots, and supplied with manure water in summer, taken into a greenhouse or conservatory in autumn, will bloom beautifully till December, and sometimes even through winter.

ROSA INDICA, the CHINA ROSE.—Its ever-blooming qualities have made it a favourite, and perhaps no plant has contributed so much to enliven our cottage walls as the common China Rose, and the Rosa semperflorens, or crimson China Rose. These roses are well adapted for pots, or small borders, or to train low against a wall. They bloom for a long season, and very freely, some being fragrant too. Most of them are quite hardy.

NOISETTE ROSE.—The Noisette has been originated between the musk and the common China, or Indica. The perfume of the musk is very apparent, its tendency to bloom in large clusters like the musk rose also shows its affinity, and they are produced in profusion through the summer and autumn. Some of them are well adapted for pillars, or training to fences and walls, as well as standards, in which mode they form fine heads of pendant branches. They grow well in all soils and situations, and require the branches to be thinned out in March. They bloom from June to November.

HYBRID CHINA ROSES.—This section has been originated between the China tea-scented Noisette and Bourbons, fertilized with the French, Provence and other summer roses, and also to the latter being crossed with the former, the seeds from which produce hybrid China roses. The character of the section is smooth shining foliage, being sub-evergreen, branches long, luxuriant and flexible. They give a long series of flowers, but not a secondary one. They do well as standards, forming fine heads. They require to have a free supply of manure over the surface of the roots both in autumn and spring, and be kept moist when in bloom; a covering of manure tends to that; in summer a covering of moss over the dung conceals it from sight. They are well adapted for rose beds on lawns, or as dwarf standards, and some of the strongest growing kinds as pillars. They bloom abundantly, and require close cutting in when pruned.

CLIMBING ROSES. The AYRSHIRE.—It is considered by the most eminent rose fanciers that this tribe had its origin from the Rosa arvensis, the common rose of our English hedges, and has acquired much additional vigour from the accidental impregnation. Shoots of the single and semi-double white on some occasions grow in one season from twenty to thirty feet long. They make fine pendant heads when grown as standards. They are well adapted to train up the stems of trees; and to form undergrowth amongst trees, or cover a bank, they are admirable, as one plant will soon cover a space of fifty square yards.

ROSA SEMPERVIRENS. The EVERGREEN ROSE (Climbing).—The origin of this class is the climbing wild rose of Italy, which has single white flowers and foliage nearly evergreen. The flowers are mostly small, not exceeding what is termed middle size; they are produced in large clusters, or corymbs, of from ten to fifty blossoms in each. The plants are of the easiest culture, flourishing in any good soil, they are valuable for covering fences, walls, stems of trees, as pillars or as standards, form a pretty object, also for spreading over a bank, &c., and being nearly evergreen, increases their utility and beauty. They are excellent for training as festoons. They should be pruned at the end of February, and then only just shortening the ends of the shoots left; a portion should be cut out if the shoots are very numerous. To cut those retained very far down would induce but few new shoots to push, and they be so vigorous as to grow to a great extent and usually such produce no bloom. Each autumn a supply of manure to the surface should be pointed in.

ROSA ALPINA. The BOURSAULT ROSE.—This class owes its origin to the Rosa alpina, the single red rose of the Alpine mountains. The shoots are long, having few spines, and of a red colour. They grow rapid, are very hardy, and do well as climbers or pillar roses. The flowers are produced in immense clusters. They require but little pruning.

ROSA MULTIFLORA. MANY FLOWERED ROSE.—A native of Japan ; and from the original one introduced into this country, crossed by other kinds, some beautiful hybrids have been obtained. The class is rather tender, and requires in this country to be trained against a wall, or otherwise to be protected. In warm countries some of the class will form pillars thirty feet in height. They require but little pruning, and that to be done in March. If cut in short, they make strong shoots, which rarely bloom.

ROSA BANKSIA. The BANKSIAN ROSE.—This class is tender, require a wall, and a warm and dry situation, and where the flowers, which are produced early in spring, can be screened. They require to retain all the small twiggy shoots, and the luxuriant to be cut away in autumn.

ROSA LUTEA. The AUSTRIAN BRIAR ROSE.—The original rose of this class was found growing on the hills of the north of Italy. The shoots, when ripe, are of a yellowish brown, prickly. The plants require a moist soil and dry pure air, with a moderate supply of manure, also but little pruning, they bloom very freely. The fine and brilliant yellow of some render them very showy.

ROSA SULPHUREA. The DOUBLE YELLOW ROSE.—It requires a warm situation, rich soil, and a free and airy exposure. At Genoa and Florence it blooms vigorously, under such circumstances, in vast profusion.

ROSA INDICA ODORATA. The TEA-SCENTED CHINESE ROSE.—The original plant was sent from China. The seed vessel is large, leaves large, and shining flowers globular and fragrant. The roses of this class are tender, requiring a dry situation, a raised bed, rich loamy soil, and to be in a sheltered place. The best method is to raise a succession of plants every year, as they strike so freely from young slips inserted in white sand, and having one year old plants in pots turn them into the open ground in April, such will make a fine display through the summer.

(*To be continued, with a Descriptive List of ten of the best of each class.*)

# PART II.

## LIST OF NEW AND RARE PLANTS.

**Cattleya superba. The Superb.** (Bot. Mag. 4083.) Orchidaceæ. Gynandria Monandria. (Synonym C. Schomburgkii.) Discovered by Mr. Schomburgh in British Guiana, and forwarded to Messrs. Loddiges's, with whom it has bloomed. Sepals and petals of a pretty rosy-lilac colour. Labellum of a deep purple-red, somewhat paler at the edges. The peduncle of flowers contains four or five in each. A separate blossom is about four inches across. They are most powerfully fragrant morning and evening. It well merits a place in every Orchideæ house.

**Clerodendron infortunatum. Unlucky Clerodendron.**—(Bot. Reg. 19.) Verbenaceæ. Didynamia Angiospermia. This beautiful hot-house shrubby plant is a native of Ceylon, and is now in the collection at Sion Gardens, where it has bloomed, and is a most splendid flowering species. The flowers are produced in large panicled heads, of a fine orange-scarlet colour. It well deserves a place in a hot-house collection. There is another species named fortunatum, which is used beneficially in medicine, while the present species. C. infortunatum, is dangerous, on which account the specific name has been given to it.

**Eria floribunda. Many-flowered.** (Bot. Reg. 20.) Orchidaceæ. Gynandria Monandria. A native of Sincapore, from whence it was imported by Messrs. Loddiges's. The flowers are produced on small drooping racemes, about three inches long. Each blossom is near half an inch across, white, having the petals slightly tipped with rose.

**Epidendrum vitellinum. Yolk of Egg coloured.** (Pax. Mag. Bot.) Orchidaceæ. Gynandria Monandria. A native of Mexico, sent from thence to Messrs. Loddiges's, with whom it has bloomed. The flowers are produced in erect terminal racemes of from 12 to 20 in each. A separate blossom is near three inches across, of a beautiful scarlet-orange colour, displaying a superb appearance.

**Ilex platyphylla. Broad-leaved Canarian Holly.** A plant of which is in the greenhouse at the Royal Gardens of Kew. It is peculiar to the Canary Islands, and forms a very beautiful, small, evergreen tree. The flowers are white, in cymes, numerously produced. We have seen it grow very freely in the open air of this country, and it proves quite hardy.

**Linum trigynum. Three-styled Flax.** (Pax. Mag. Bot.) Linaceæ. Pentandria Pentagynia. It was introduced into this country from the East Indies many years ago, and is treated now as a greenhouse plant. It is a very abundant bloomer, and a highly ornamental one when in flower. If it be grown in a hot-house it blooms from December to April. If in a greenhouse it blooms from May to the end of summer. It is a suffruticose (somewhat shrubby) shrub, growing about two feet high. The flowers are produced in terminal as well as lateral spikes. Each blossom is about two inches and a half across, of a rich orange-yellow colour. It deserves to be in every collection, and may be procured cheap.

**Nerium Oleander. var. Tangle. Striped-flowered.** (Pax. Mag. Bot.) Apocynaceæ. Pentandria Monogynia. This very pretty flowering plant is supposed to be of continental origin. The flowers are semi-double, produced in large clustered heads, each blossom being two inches and a half across, of a deep crimson, striped with white and pink. The plant blooms when about nine inches high. It deserves to be in every greenhouse.

**Phlomis Cashmeriana. Cashmere Phlomis.** (Bot. Reg. 22.) Labiatæ. Didynamia Gymnospermia. It is from the valley of Cashmere, a hardy perennial, growing about two feet high, blooming from June to September. The flowers are produced in whorls, which form long spikes; they are of a pretty lilac colour.

Phajus bicolor. Two-coloured. (Bot. Mag. 4078.) Orchidaceæ. Gynandria Monandria. A native of Ceylon, which has bloomed in the collection of Dillwyn Llewellyn, Esq., at Penllegare. The flowers are produced so as to form a spike about two feet long. Each blossom is near four inches across. The sepals and petals are of a pale yellow-brown outside, and of a deep chocolate-brown, striated, inside. Labellum, the cucullate, or tubular portion yellow; the limb is three-lobed, the middle one of a yellowish-white, the side ones rose colour. It is a noble flowering species, well deserving cultivation.

Schomburgkia crispa. Crisp-flowered. (Bot. Reg. 23.) Orchidaceæ. Gynandria Monandria. It has bloomed in the beautiful collection of Mrs. Marryatt, of Wimbledon. The flowers are produced in a terminal short raceme, of ten or twelve in each. A separate flower is about an inch and a half across. The sepals and petals are of a reddish-brown, edged with yellow, which are curled or crumpled. The Labellum is white, with a streak of pink, and edged with sulphur.

Trochetia grandiflora. Large-flowered. (Bot. Reg. 21.) Byttneriaceæ. Monadelphia Polyandria. Sent from the Mauritius to the collection at Sion Gardens, where it has bloomed. The plant is a seedling, about six feet high. The flowers are produced in a pendulous cluster, three or four in each. A separate blossom is about three inches across and one deep, white, with a yellow blotch at the base of each petal.

Nematanthus chloronema. Shorter-flower-stalked. (Bot. Mag. 4030.) Gesneriaceæ. Didynamia Angiospermia. Found in the Organ Mountains, and has been sent to the Glasgow Botanic Garden, where, in the stove, it has bloomed. The flowers proceed from the axils of the leaves two or three at each. The footstalk is about two inches long, and the flower funnel-bell shaped, near two inches long, of a rich crimson-red colour. The plant deserves a place in every plant stove.

Gongora maculata, var. tricolor. Rev. J. Clowes, of Broughton-hall, near Manchester, received it with information that it came from Peru. It is a most beautiful flowering variety. The ground colour of the flower, except the lip, is a clear yellow; the column and petals are delicately banded with rich sienna-brown, and a few striking blotches of the same colour on the sepals. The lip is white, with a cinnamon-coloured stain on the ends and the sides of the tubercles.

Anguloa Clowesii. A genuine species of this plant has at length been obtained by Rev. J. Clowes, from the Columbian collections. It is a noble plant. Each blossom is four inches in diameter, of a fine lemon colour, having a pure white lip.

Miltonia cuneata. Flowers four inches across. Sepals and petals a rich brown, tipped with green. Lip pure white. It has recently flowered at Messrs. Rollisson's.

Oncidium Papilio. There are several varieties of this singular Butterfly flower. Messrs. Rollisson's possess one very much superior to any other we have noticed. The colours are much deeper and very distinct; in contrast with the older varieties this is much superior.

Schomburgkia undulata. In Mrs. Lawrence's collection at Ealing Park, and at Mr. Rucker's. It very much resembles the S. crispa in general features. (see description above) but the flowers are much larger and of deeper colours; the lip has a pretty purple-violet upon it.

### *At Mr. Low's, of Clapton, Nursery.*

Camellia Saccoi.—The flowers are of a beautiful pink, slightly and handsomely spotted with deeper coloured spots. The flower is double, the petals very perfectly arranged, round, and thick in substance. It is of first-rate merit, and well deserves to be in *every* collection. Mr. Low obtained it, along with others, from the Continent. We have not seen it in any other of the London collections, but, if we mistake not, Mr. Low has plants of it for sale.

**BRACHYSEMA VENOSA.**—A new species, which has not bloomed there yet. It is a pretty looking plant for the greenhouse.

**OXYLOBIUM ACUTUM.**—Very much in the way of Chorozema Dicksoni, when it is in bloom, and well deserves a place in the greenhouse.

**TACSONDIUM SEMPERVIRENS.**—It is a cypress-like looking plant. It is supposed to be hardy, and an interesting addition for the shrubbery.

**TACSONDIUM PINNATUM.**—Of a similar character to the above.

**MAGNOLIA HARTWICUS.**—Is an hybrid, between M. Exmouthea and M. Fuscata. It is a hardy evergreen, very highly spoken of. It has not yet bloomed here.

**STEPHANOTUS THOUARSII.**—It has not yet bloomed here. The foliage is narrower than S. Floribundus, and more pointed. We understand that, like the last-named, it is a handsome species.

**STATICE PLATYPHYLLA.**—A large broad-leaved species. The flowers are of a deep blue and white, similar in character to Arborea, but the contrast of blue and white is much more distinct than any other sort we have seen.

**ENKIANTHUS QUINQUEFLORA.**—The flowers are similar in character to the other species, but of a pretty flesh colour.

**SIPHOCAMPYLUS PARTHONI MAJOR.**—This new kind has not yet bloomed here.

**THIBAUDIA.**—New species. The plant is of the Arbutus tribe, very neat in its appearance. The flowers are of a similar character in form, but of a scarlet colour.

**BILBERGIA ACAULIS, VAR. ZEBRINA.**—The foliage is in form like a short stiff pine-apple plant. It is handsomely streaked across with mealy streaks, which give it a singularly neat appearance.

**FRANCISIA HYDRANGEFORMIS.**—A fine looking plant. The flowers, we are nformed, are produced in large heads, similar to the common Hydrangea, of a blue and white colour. They are, too, as fragrant as those of F. Hopeana.

**GARDENIA CHERBOUNI.**—The flower is something like an Œnothera in appearance, white with a pink spot; very sweet. It is a very pretty addition to this charming family.

**FRANCISIA VILLOSA.**—Very like F. latifolia. The flowers of a light blue colour; very pretty.

**EUPHRASIA CUNEATA.**—A trailing plant, very much like trailing Lobelia. The flowers are blue.

**ARDISIA MEXICANA.**—The leaf is large and noble in appearance, very like a fine Magnolia leaf. It has not yet bloomed.

**MACLAINEA INSIGNIS.**—The flowers are produced in clustered branching racemes, much like Andromeda floribunda, and are scarlet. It is highly spoken of.

**LEIANTHUS NIGRESCENS.**—The flowers are, in form, like a Lisianthus Russellianus, and nearly black. Each blossom about an inch long.

**RHODODENDRON FERRUGINEUM ALBUM**—The white-flowered variety of this neat bush is also in the collection here; it deserves a place in every peat border or bed.

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### *At Mr. Knight's, King's-road, Chelsea.*

**EPACRIS CAMPANULATA ALBA.**—Several plants of this beautiful Epacris were in profuse bloom in the greenhouse. The snowy white waxy-looking bell-shaped flowers render it deserving a place in every greenhouse. It is sold cheap.

**EPACRIS VARIABILIS.**—A very distinct and neat variety. The flowers are bell-shaped, and of a beautiful pink.

**EPACRIS RUBRA.**—This is also a very distinct variety. The flowers are bell-shaped; pink, with the ends of the blossoms bright red. Each of these Epacrises are very ornamental, and particularly so being early bloomers, and continuing in bloom for several months.

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### PLANTS SEEN AT THE LONDON HORTICULTURAL SOCIETY'S GARDEN.

**KENNEDYA MARRYATTI.**—In the conservatory is planted to train up inside the curvilinear roof. When it had reached about nine feet high, having numerous lateral branches, the leading shoots were divided to turn, in equal portions, one to the right and the other to the left, and have extended about four feet on each side. The plant was almost one mass of bloom, the showy rich red flowers producing a brilliant appearance. We never saw, elsewhere, anything near so well cultivated a specimen as this, or so well managed. It deserves a place wherever it can be grown.

**Veronica speciosa** (figured in our present number).—A fine specimen of it, being five feet high, which blooms profusely, growing in the border in the conservatory.

**Clianthus puniceus.**—A dense bush, twelve feet high, with, apparently, several thousands of flowers. A very striking specimen.

**Podalyria styracifolia.**—A most beautiful specimen; the tree-like plant, being twelve feet high, having numerous long branches, all of which were actually laden with blossoms. They are of the pea-shaped class, large, of a lively lilac colour, becoming paler towards the base of the petals, so as to be nearly white. The plant deserves a place in every conservatory.

**Boronia anemonifolia.**—A fine plant, literally one mass of bloom. We have seen numerous specimens in other places, but this very far surpasses in profuse bloom any others we have seen. It was grown in sandy peat, and had not been allowed to grow too vigorously.

**Erica longiflora splendidissima.**—The blossoms are of a rich rose colour, very pretty.

**Luculia gratissima.**—A handsome plant, is growing in the border of the conservatory. It is now ascertained that the plant blooms much more freely when it is grafted on the stem of Burchellia Capensis. It readily unites, and is the best mode of increasing this truly splendid flowering plant.

**Achimenes picta.**—This new and beautiful species was in profuse bloom. The flowers are much in the way of A. pedunculata, but expands more at the mouth, and the limbs are larger. The upper half of the flower, dividing it lengthwise down, is of a rich red, and the lower half yellow, streaked and spotted with rich red. The plants were about a foot high, and in profuse bloom. The foliage is hairy, green freckled, and marked with a lighter colour, very distinct and pretty. The plant was growing in the stove.

# PART III.

# MISCELLANEOUS INTELLIGENCE.

## QUERIES.

**On Cow-dung for Rhododendrons.**—Is cow-dung good for promoting the vigour of Rhododendrons.

[Yes, applying it when well rotted, digging it in at the extremities of the roots, to lay a portion over the surface and sprinkle a slight portion of peat over will also improve them.—Conductor.]

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**On Hot Water Pipes.**—Some time back I had a conservatory heated by hot water, in pipes; when I no longer require to have the use of the hot water to heat the house, as in spring and summer, I am puzzled to know whether it is best for the pipes, &c., to draw off the water entirely from the boiler and pipes, or to keep them full till the return of the heating season in autumn. Perhaps some reader of the Cabinet may have had experience in the matter, or having seen old pipes which have been broken up, has had an opportunity of observing the different effects of being kept empty, or retained full of water, will favour me by information. An early answer will much oblige

The Colonel.

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**On growing Gloxinias in a Frame and Greenhouse.**—I am anxious to cultivate several of the Gloxinias, but not having a plant stove, I am desirous to know if they could be brought forward properly in a hot-bed frame, such as a cucumber bed, &c., and then be removed into the greenhouse so as to succeed in blooming satisfactory. LOUISA.

[Early in February the dried bulbs should be repotted, shaking off all the old compost, and potting them in equal parts of rich sandy loam, (not sifted,) and peat and leaf mould, only insert them about one-half deep in the compost. After potting place them in a hot-bed frame, be careful not to give water till the shoots push, unless the soil become quite dry, but when growing give a proportionate increase. Admit air to prevent the shoots being weakly. They will soon show for bloom, when this is seen, they may be removed to the greenhouse, placing them near the glass, where they will bloom as well as if they had had entire hot-house treatment. After the bloom is over which will generally be in September, gradually withhold water, when quite dry remove the pots, keeping them entire, to a dry place, from frost till February. Any of these kinds will succeed. The following are the kinds most recommended :—

G. Candida.
Caulescens.
Grandiflora.
Maxima.
Menziesii.
Speciosa.
Violacea.

G. Speciosa alba.
Macrophylla.
Priestleyana.
Rosa alba.
Rubra.
Discolor.
Hybrida superba.

The prices of which being from 1*s*. 6*d*. to 2*s*. 6*d*. each, place them within the purchase of amateurs of this class of florists.—CONDUCTOR.]

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ON FUCHSIA AFFINIS, (radicans of some.) I had a plant of Fuchsia affinis, or radicans, last spring; it was kept in a good greenhouse, grew freely, but not a single blossom was produced. I should be obliged if informed how to treat it, so as to induce it to bloom this season. An early reply will be an additional favour. A BEGINNER.

[It ought to have but little pot room, which will induce it to show bloom. As soon as the blossoms can be distinguished repot into a larger and give the plant every encouragement, and a vigorous bloom will be produced. It must not be repotted till it shows bloom again the following season, when repot, &c.—CONDUCTOR.]

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ON A SHADE FOR CARNATIONS.—It would be a real kindness, if either you, or any one of your numerous correspondents, would, in an early number of your CABINET, give some plan for a shade for a small collection of Carnations, say fifty pairs, so that the whole number might be seen at once, as they cannot be, when shaded by separate shades. The plan should, if possible, be simple and unexpensive, to admit of general application in my locality.

[When the plants are grown in the open border, a temporary ridge roofed covering, formed with corner supports of a sufficient height to stand erect underneath, and having a permanent covering over the roof, and ends, and on each side constructed to draw up or let down, so as to admit air, &c., as desired, or exclude sun, wind, or rain. A covering of jacconet, prepared with Whitney's transparent waterproof composition, is the best material that can be used. The entire cost is but 6*d*. per square yard. When grown in pots a permanent erection can be constructed in any suitable situation, and the roof be removed after blooming, or the erection be used for other purposes.—CONDUCTOR.]

## REMARKS.

CAMELLIAS.—We visited early in April the London collections of this noble tribe of flowering plants, at Messrs. Low's, Chandler's, Smith of Dalston, and Loddiges's, and found the following to be the best in the various collections.

TRAVERSE.—A light rosy red, blotched with white, petals imbricated.

Minutæ.—Rose, with round petals. Very good.

Albertus.—White, striped and blotched with rose and pink. Very superior.

Presley rosea.—Blush, striped with rose. Very good.

Punctata.—White, spotted with light rose. Very good.

Corallina.—Rich red, large flower, double, with an Anemone centre. Very fine.

Imbricata alba.—White, with occasionally one stripe of pale rose up the centre of some of the petals. Very pretty.

Rossi.—Red, large flower. Very double, good.

Triumphans.—Fine pink, very double and large, occasionally having blotches of white. Very fine.

Lady Grafton.—Deep rosy red, very double, and a splendid variety.

Landressii.—Blush, streaked with white. Very double and very fine.

Marchioness of Exeter.—beautiful pink, very double and very large. A most superior variety.

Henri Favre.—Pale rose, very double and very good sort.

Hendersoni.—Pale blush-rose, slightly striped with lighter colour.

Donkelarii.—Light red, with large and small patches of white. Semi-double, very large and very showy.

Spofforthiana.—White, slightly striped with rose up the middle of the petal. Very pretty.

Florida.—Very double, but when the flower is about three parts expanded, it appears very beautiful having then a fine cup shaped appearance.

Queen Victoria (or Presleyii.)—Red, with a stripe of white up the centre of the petal.

Eximia.—Crimson red, flower large, and good form.

Nitida.—Pink, with a very distinct stripe of white up each petal, flower good form.

Sweetii.—Pale rose, striped, &c., with carmine flowers of the Pœony form. Very pretty.

Beali.—Crimson red, petals imbricated and marked with white.

Carswelliana.—Fine rose, with a stripe of white, much the form of the admirable old white.

Delicatissima. Very beautiful white of the Pœony shape, and occasionally a stripe of carmine. Very fine sort.

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On Whitney's Composition.—We have seen a house covered with glazed calico, coated over with this composition, and during the late hot sunny weather, it proved admirable for the growth of a general collection of greenhouse plants; it admits a clear light, quite sufficient for the growth of the plants, and at the same time so shades them from the bright sun, that there is not the least symptom of flagging.

We find too it answers every expectation for the growth of melons, cucumbers, &c. For a house to strike cuttings in it will prove all that could be wished, affording warmth and shade at the same time and no danger from any casualty of neglect to shade, as is often the case in glass houses.

The use of this for protecting wall trees, shading greenhouse plants in summer, florists' flowers, &c., &c., will no doubt become general.

[We can supply the composition, or prepared covering, and shall be glad to give any information which our experience and observation enables us to do.—Conductor.]

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## LONDON HORTICULTURAL SOCIETY, REGENT-STREET.

On April 2nd Mr. Hunt Grubbe, of Shirley, near Southampton, sent a specimen of slate wall contrived by him, which was stated to have the following recommendations. If placed direct with the meridian, and thus made to have an equal share of sun on both sides, it will ripen any fruit on either side earlier than the south side of a brick wall by means of the transmitted heat. It is not recommended as an outside fence, as it is liable to be broken; but chiefly for intersecting the interior of gardens in the place of dwarf or shelter hedges. It consists of squares of slate grooved into each other, and strengthened by piers or pillars, which are placed at certain distances—and, being built with circular and square bricks cemented together, are round and stand out a little from the wall. The trees are fastened to wires, which are fixed into the slate about six inches apart. Mr. Grubbe stated that this wall could be erected for 5¼*d.* the square foot, being 1*d.* less than even a 4½-inch brick wall, which costs 6¼*d.* the square foot. From the gardens at Chatsworth were two bunches of West St. Peter's Grape, shrivelled, and in the condition of fine raisins, which Mr. Paxton stated to be of last year's growth, and to have been kept through winter at an almost nominal expense of fuel. The house they have been kept in was in a low situation, and therefore not well suited for late Grapes. Mr. Paxton considers it a better Grape than the Black Hamburgh; and if both have the same treatment, the St. Peter's will keep six weeks or two months longer than the Hamburgh. Along with these were also the following plants :—Dendrobium Paxtonii, a large specimen, with orange blossoms, having a black spot in the centre; also Eria excavata, cut specimens of Dendrobium Wallichii, D. cærulescens, and Cœlogyne interrupta, the latter with pretty white and yellow flowers. A Knightian medal was awarded for the Dendrobium Paxtonii. Messrs. Loddiges, of Hackney, sent Dendrobium macrophyllum in good condition; this rare species is remarkable for the strong aromatic fragrance of its fine lilac blossoms. A Knightian medal was awarded for it. From Mr. Green, gardener to Sir E. Antrobus, Bart., was a most beautiful large specimen of Erica aristata major, uniformly covered down to the pot on all sides with pretty carmine and white waxy blossoms; it was also feathered with healthy dark green leaves to the very extremities of the branches. Along with it was a seedling Calceolaria (called zebrina), the flowers of which were of a bright yellow, beautifully spotted with brown; Amaryllis hybrida, and Boronia anemonefolia, the latter with pretty rose-coloured flowers. A Banksian medal was awarded for the Erica. Mr. Jackson, of Kingston, sent Tremandra Hugelii, a greenhouse plant, with drooping star-like lilac blossoms, having a small dark spot in the centre. From Mr. Fielder, gardener to W. Linwood, Esq., was a cut specimen of Phycella chloracra, a bulb sent by Mr. Hartweg from rocks near Saragura; the flower-stem that bore the handsome but not gaudy green, red, and yellow blossoms sent was said to have been 3 feet 2 inches high. Mr. Robertson, gardener to Mrs. Lawrence, sent a collection of plants containing Cyrtopodium Andersonii, rarely seen in such perfection; an enormous specimen of Maxillaria Harrisonii in wonderful health; Brassia Wrayæ, a species from Guatemala; Oncidium ampliatum major; O. luridum; a Hippeastrum, and a well-grown plant of Erica Willmoreana. A Knightian Medal was awarded for the three first. From Messrs. Henderson, of Pine-apple Place, was Odontoglossum Rossii, sent from Belgium under the name of Oncidium Bergamia. From the same collection were Dillwynia tenuifolia, a scarce New Holland shrub, which has a gracefully drooping habit, and is a remarkably free bloomer; Brachysema platyptera; Epidendrum aloefolium; Boronia anemonefolia, and Dendrobium cærulescens covered with blossom. A certificate was awarded for the Dillwynia and Brachysema. Mr. Ivery, of Peckham, exhibited seven seedling Cinerarias, and a plant of the new Nemophila discoidalis. From Mr. Lee, gardener to P. Pole, Esq., was a Cucumber which measured 21½ inches long. From the garden of the Society were the following plants :—Acacia hispidissima, Boronia anemonefolia, Begonia papillosa, B. acida, Columnea Schiedeana, the larger variety of Oncidium ampliatum, Acanthophippium bicolor, with curious yellow cupped blossoms, and Echeveria rosea, a greenhouse plant remarkable for its bright red leaves that are more conspicuous than the flowers, which are of the same colour. It was sent to the Society by Mr. Hartweg, from Mexico. It is not impatient of cold, having been sometimes exposed to a temperature as low as 35°; it will also, on the contrary, stand any amount of sun-light, and it keeps in bloom during the whole winter, so that it is a very useful plant for many purposes. With these was a flower of Aristolochia Gigas, or "Pilate's Nightcap;" a twining stove plant, which bears singular large concave blossoms, having considerable resemblance to those of A. fœtens, but much larger, and assuming more the appearance of a cap.

The Floral Exhibitions in London at the Regent's Park Royal Botanic Gardens, Horticultural Society, at Chiswick Gardens, and the Royal South London, at the Surrey Zoological Gardens, during May, June, and July, &c. They are expected to far exceed any former ones in the quantity and quality of specimens.

At Regent's Park Gardens, on Tuesday, April 30th, June 4th, and July 2nd.

Chiswick Gardens on May 18th.

Surrey Zoological Gardens, Tuesday, June 18th, July 23rd, and September 17th.

## FLORICULTURAL CALENDAR FOR APRIL.

**Greenhouse.**—During the early part of May a few frosty nights generally occur; in consequence of which, it is advisable not to take out the general stock of plants before the middle of the month, or even, in cold situations, before the 25th. Whilst the plants, however, remain in the greenhouse, let them have all the air that can be given during the day, and at nights if no appearance of frost. Particular attention will now be required to afford an ample supply of water to free growing kinds of plants. Frequently syringe them over the tops at evening just before sun-set. If any of the plants be attacked with green fly, or any other similar insects, apply a sprinkling of tobacco-water, diluted with water, by adding to one quart of the liquid five of water; in applying which to the plants, syringe them at the under as well as upper surface of the leaves; a repetition will rarely be required. This mode of destroying the insects is far preferable to fumigation, no injury being sustained by it, even if applied in a pure state. The liquid can be obtained of tobacconists at 10*d*. or 1*s*. per gallon. It is a good time for increasing plants by cuttings, striking in moist heat. Greenhouse Annuals—as Salpiglossises, Globe Amaranthuses, Balsams, Coxcombs, &c.—should be encouraged by a little warmth, and shifted into larger pots early in the month; so that the plants may make a show, to succeed the removal of the general collection of greenhouse plants. Cuttings or suckers of Chrysanthemums should now be taken off and potted in rough, rich compost, having a free drainage, if not done before. Achimenes coccinea, longiflora, rosea, &c., plants, should be potted singly into a light rich soil, and be forwarded in the stove, and repotted as they advance in growth, not too much at a time, but as root room appears necessary. Lobelias for the greenhouse should be similarly treated, as to potting, &c.

**Flower Garden.**—Continue to protect beds of Hyacinths, Tulips, &c. Carnations in pots should be encouraged by manure water, &c., in order to grow them vigorously; care in tying them will be required. By the middle of the month half hardy annuals—as China Asters, Marigolds, &c.—may be planted out in the open borders. Some of the best kinds may be potted, as done to the more tender sorts. Many kinds of greenhouse plants—as Petunias, Salpiglossises, Salvias, Fuchsias, Heliotropes, &c.—should now be planted out in the open border. Dahlias that have been forwarded in pots, frames, &c., may be planted out towards the end of the month. Seedlings may be pricked out, in a warm situation, having a deep, fresh, rich soil. When Stocks, Mignonette, China Asters, &c., are wished to bloom late in the year, seeds may now be sown, either under a frame or on a warm border. Slips of double Wallflowers should now be put in under a hand-glass. Seeds of biennials—as Sweet Williams, Scabious, Campions, &c.—should now be sown. Tuberoses, for late flowering, should now be repotted or put into warm borders. Offsets of Campanula pyramidalis should be repotted in rich soil, and placed in the greenhouse. Repotting must be continued till they cease to grow; by this means the plants will reach eight feet high, and be very branching. Cuttings of Geraniums, Salvias, Heliotropes which have been struck for planting into open beds, and not potted off, should be immediately done, so as to be well prepared for turning out by the 20th. Auriculas and Polyanthuses will require shading, but admit all possible air, or the flower stems will be very weakly. Protect from rain. Ranunculuses and Anemones shade, water, &c.—See Articles in former Numbers on each.

1. Achimenes Picta 2. Nerium Oleander Single.

THE

FLORICULTURAL CABINET,

JUNE 1st, 1844.

# PART I.

## EMBELLISHMENTS.

## ARTICLE I.

### ACHIMENES PICTA.

This very lovely flowering plant has recently been introduced into this country, and has been distributed to several of the principal nursery establishments by the London Horticultural Society. We are not aware of its native habitation, but as it flourishes well in the same circumstances and treatment as the other new species, we suppose it to be from the same country. The plants we saw, in most profuse bloom, were about a foot high, and had been kept in a plant-stove. There is no doubt but, if grown in a hotbed frame during its early stage, it may be removed into a warm greenhouse, &c., to be a summer's ornament there. We understand it will bloom from April to the end of October, and certainly deserves a place wherever it can be grown.

### NERIUM OLEANDER VAR. TANGII.

We met with this very beautiful and ornamental plant in the collection of Messrs. Lane and Sons, of Berkhamstead, and from whom we obtained plants. It grows freely, and blooms profusely, even when the plants are quite dwarf. It is of easy culture, and one of the most interesting of *greenhouse* plants, well deserving a place in every one.

## ARTICLE II.

### REMARKS ON THE PINK.

BY MR. THOMAS CONNELLY, FLORIST, PRESTON.

On looking over the Numbers of the Cabinet for March and April, I perceive a good deal is said concerning this most beautiful flower. It is strange that so much difference in opinion should exist between the south and the north country growers. When Pinks are introduced into this part of the country from the south, they for the most part burst, and are filled with small petals and bad lacing; this cannot be because of the change from the south to the north—there must be some other cause. Mr. Ibbett, of Woolwich, in Kent, says, "he never saw, or heard of, a good Pink in Lancashire." This is passing strange; so that all the Pinks raised in this county amongst the best of growers, goes for nothing, and which have been, and continue to be, sent to all parts of the country; and it is most extraordinary that none have yet found their way into the county of Kent. Mr. Ibbett further adds, that he has had the pleasure of supplying his Pinks into many of the northern districts. Be it so. I have frequently met with what is called Pink fanciers, whose taste and fancy was, the bigger the flower the better esteemed; the *bursting*, small *petals*, bad *lacing*, were not deemed faults: the individuals whom Mr. Ibbett supplied may have been of this class of admirers. I have always considered the Pinks of the south and the Pinks of the north quite different in character, and fully agree with Mr. Dent, here, in what he says in the April Number of the Cabinet; indeed, it would be better if the south growers would give up the contest, and say at once, what we have frequently said, are the Pinks they most esteem; and I will answer for all the Lancashire growers that they will feel quite comfortable on the subject—we, with our clean, *unbursting pods*, good leaf, (petal,) well laced, and having as many floral leaves as to form a regular flower—they, with their large, *bursting pods*, full of small *petals*, with *bad lacing*, and in which there is nothing to make a good Pink of. All will then be perfectly satisfied that they possess flowers suited to the fancy of themselves, and those who dispose of them, for their customers. There will be a Pink show here next month, when I will forward a list for the

CABINET, also a few specimens in flowers, properly labelled, to any who may require it, and by which a judgment may be formed of the merits of each kind.

Preston, 4th May, 1844.

# ARTICLE III.

## REMARKS ON THE PINK.

BY MR. THOMAS IBBETT, FLORIST, BULL-FIELDS, WOOLWICH, KENT.

"Errors alone needs artificial support—truth can stand by itself."

IN the Number of the FLORICULTURAL CABINET for April last, I find in Articles 5th and 6th some observations on what I had written in the previous Number, the former by "Florista," the latter by Mr. William Dent, of Preston, Lancashire. To those two gentlemen I beg to observe, it is not my intention to retract, in the smallest degree, any statement I therein advanced, but on the contrary, shall endeavour to show that I am not alone in that opinion. I consider, however, in the first place, I am not bound to answer persons any question which they may think proper to ask, except in substantiating my remarks as positive facts. Prior to my seeing the CABINET for April last, (not having called for it till the 8th,) I received a letter from a gentleman in the north, dated 3rd April, requesting me to forward some specified sorts of Pinks, among which were Norman's "Henry Creed," and Unworth's "Omega;" in conclusion to his letter, he made some remarks in allusion to the article I had written, of which, by his permission, I now take the opportunity of inserting a verbatim copy, viz. :—" I am glad you have given the Lancashire florists *a hint* about their Pinks, as their taste is PERFECTLY RIDICULOUS. We got many of their sorts here a few years ago, but threw them all away after one season, they were so small. The most of them had only two rows of petals, and that will do nothing for Felton; we must have them large, full, and well crowned, or they are of no use here. I think there is no difference between your taste and ours, and I am glad you have said so in the CABINET." A few days after I received this, I sent to the gentleman to know if he would allow me to insert his remarks in the CABINET. I received the following reply:—" I have no objection whatever to your using my remarks on the Lancashire Pinks in your next article in the CABINET, as I know full well that my opinion of them is quite correct. What I have seen of them are perfectly useless here for competition, as they *want stuff*. In fact, some of them come with only two rows of petals, and were *little larger than a waistcoat* button; but flowers of that size will not *satisfy the Northumbrian amateurs,* who want rose-leaved flowers, of *large size,* and well crowned, with central petals. In fact, our taste in this respect is *precisely the same as that of* the London growers, and this makes us buy up the southern celebrated kinds of pinks in preference to going to the Lancashire markets." Should any person doubt the genuineness of the above observations, I will refer him to Mr. William Harrison, Felton Bridge-end, Northumberland, who, I have no doubt, will give any information on the subject alluded to in this article. I would beg to call attention to the acknowledgment of Mr. Dent, that the Lancashire Pinks are not grown by any of the London florists, but he has not given any reason for their not doing so; on that point I will most cheerfully assist him—that is, because they are good for nothing. Mr. D. has named a number of sorts of Pinks, which he styles the "London Pets;" should he bloom them as they are bloomed about London, I am quite certain he will do as they did at Felton, throw out their Lancashire productions, and cultivate in future the standard of excellence so universally acknowledged to be attained by the metropolitan growers.

In concluding these remarks, I should be very sorry to hurt the feelings of any of the Lancashire gentlemen, but truth will stand the test of time, and bear me out in the above observations.

## ARTICLE IV.

## REMARKS ON THE CULTIVATION OF PLANTS IN CHARCOAL.

BY MR. J. E. TESCHEMACHER.

(Inserted in *Hovey's Magazine of Horticulture,* a work published in New York, monthly.)

THE first view I took of the value of charcoal in horticulture arose from the arguments on the different powers of well-rotted and of fresh manure; my prejudice, from constant practice, being rather in favour of the former. And one of my imaginary reasons for this prejudice (for proof was not to be expected) was that the carbon of the vegetable part of the old manure was reduced by fermentation and complete decomposition (combustion, Liebig) to the finest possible state of comminution, such as it is totally impossible to imitate by the most laborious mechanical pulverization. In this finest of all states, carbon, if used at all by the living vegetable, could be most easily appropriated. My experiments were, therefore, all made with the finest pulverized wood charcoal I could procure, such as is used in making gunpowder. 1st. I planted a young thrifty plant of Daphne odora in this charcoal altogether; in twelve months it was alive, the leaves quite yellow. On examining the roots they had not in the least increased or altered. I then repotted it in loam, with one quarter charcoal, and watered with a very weak solution of nitrate of soda. In four weeks the leaves had become of a dark blackish green, and the plant was beginning to push vigorously. 2nd. I planted a fine root of Fuchsia fulgens, with a stem, in charcoal alone. It immediately began to vegetate; the leaves were, however, extremely diminutive, and soon dropped off; the flowers appeared also diminutive, and finally dropped off likewise, just after opening. It then, with the others, went to rest; but, to my surprise, in August, it again began to vegetate, and went precisely through the same process as in spring, others which were by its side remaining dormant; after this it went again to rest. 3rd. I potted several seedling Camellias in one quarter charcoal, one quarter old manure, one half loam; these grew with great luxuriance, and the colour of the foliage was dark healthy green. 4th. I potted several young Pelargoniums with various quantities of charcoal, never exceeding one quarter, often very much less. In these the effect was the same, both coming very near to the luxuriance and size of foliage of those treated with guano. In August last I made up my mind to re-pot and top-dress a large number of exotic plants, of various kinds, many of which were in a bad state from neglect; of these the chief number were Camellias. I made up a compost, consisting of about two-thirds Roxbury fresh loam, and one-third a compost chiefly consisting of old manure. To this I added about one-fortieth part of charcoal, and had the whole very carefully and intimately mixed; with this I operated. In September, when I thought the earth had got well settled round the roots, I began to water, every Saturday, with water in which guano had been mixed, in the quantity of about one ounce to ten gallons. I was perfectly astonished at the alteration which appeared in about four weeks, in the general health of all the plants; it seemed to me like magic; and many who visited the public conservatory, previous to the late calamitous fire, can bear testimony to their beauty and luxuriance. The earth of one large Camellia (double white), with about 250 blooms, was nearly altogether changed, the tub having fallen off with much of the earth. I hardly expected to save the blossoms, but they opened in as great splendour as the others. It seems to me that the period of the opening of the flowers was also generally accelerated. We had twenty or thirty out the first week in November; and the first week in December, just previous to the fire, I counted above 500 in full beauty. This was certainly earlier than we had them in previous years. Passiflora Loudoni, which, under the best of common cultivation, has always yellow and unhealthy-looking leaves, was placed in this mixture, with the addition of charcoal drainage. The rapid change in its appearance was surprising, and although, from unavoidable circumstances, it was removed into this soil just previous to flowering; yet, instead of being checked, fresh flower racemes shot forth, and, with the others, opened their beautiful blossoms in the greatest splendour, the foliage becoming of a fine healthy green, and spread open, not curled in at the edges. I had several other experiments in progress on the use of charcoal, some of which I had hoped would have thrown light on its immediate action on the roots of plants, a subject on which we are at present in the dark. Unfortunately, these, with many others, were destroyed by accidental fire. My impression from these trials is that, although charcoal alone is nearly useless, yet, when mixed in due proportion with the earths and salts usually found in soils and manures, its presence is highly beneficial, and greatly promotes the luxuriance of vegetation, as far as regards stems and leaves. Of its value in the production of flowers and seeds, I am not, for the reasons before stated, able to give an opinion of any worth. It may be thought, and probably is in part true, that much of the luxuriance of the last-named experiments arose from the use of guano water; but, from other experiments with charcoal, instituted for the purpose of making comparisons with guano, and in which, of course, none was used, I cannot hesitate to believe that some portion of this luxuriance was also due to the charcoal.

# ARTICLE V.

## REMARKS ON THE TULIP TREE.

BY FLORA.

THE Tulip Tree (Liriodendron Tulipifera), being one of the most magnificent and ornamental trees for the pleasure ground, and not noticing any remarks upon it in the CABINET, induces me to transmit the following:—

This superb forest tree is named Liriodendron from Δενδρον, and λειριον, lily. As it is a tree bearing liliaceous flowers, it is also called Tulipifera, tulip tree, from the resemblance which the blossoms bear to that flower. The word tulip is of Turkish extraction, and given to the flower on account of its resembling a turban.

The vegetable world cannot present us with a more interesting object than a tree of such exalted stature, covered with a foliage so singular and beautiful, as is the tulip-tree of North America. Its spreading branches give an extensive shade, whilst they are covered with an immensity of large and variegated flowers, that appear placed on the boughs like so many porcelain vases, to catch the dews of heaven.

It is hardly possible to contemplate this noble tree, without having all sordid and angry passions driven from the breast, and exchanged for those of peace and philanthropy. We wonder, therefore, that the poets, who are naturally lovers of trees, and have awakened our interest so much in favour of most others, should so long have neglected to sing the praise of this sylvan wonder of the new world, as to leave us without a head to our chapter.

Michaux tells us, in his work on the Forest Trees of North America, that the middle and western states abound with the Liriodendron tulipifera, some of which he measured, that were 22½ feet in circumference, five feet from the ground, and from 120 to 140 feet in height. He tells us, that the timber is one of the most useful species of wood, being smooth and fine grained, easily wrought, and not liable to split, therefore desirable for the turner, as also for carving ornaments, pannels of coaches, chaise bodies, &c. It is also used for forming canoes; and frequently the trees are of sufficient size to hollow into the shape of those boats, so that they are of one piece of timber.

Kalm speaks of having seen a barn of considerable size, the sides and roof of which were made of a single tulip-tree, split into boards.

Mr. Catesby, in his Natural History of Carolina, says, there are some of these trees in America which are 30 feet in circumference· There is one inconvenience attending this wood, which is, that it contracts and expands itself more than almost any other timber.

The bark is an aromatic medicinal agent: it is often pounded, and given to horses that have the bots. The roots of the tulip-tree are said to be as efficacious in agues as Jesuits' bark.

In America these trees are distinguishable at a great distance, even when they have no leaves upon them, as the boughs are unequal and irregular, making several bends or elbows. Kalm observes, that it is very agreeable, at the end of May, to see one of these large rees, with its singular leaves, covered for a fortnight together with flowers, which have the shape, size, and partly the colour of tulips.

The leaves of this tree are generally from four to five inches broad, and about the same in length, of a singular shape, being what is termed abrupt, truncatum, appearing as if their ends were cut off with scissors; the side lobes are rounded, and end in blunt points. The upper surface of the leaves is smooth, and of a lucid green; the under side is of a pale green; and as they are supported on footstalks of four inches long, they hang and move in a very graceful manner. The flowers are produced at the end of the branches; they are, like the tulip, composed of six petals, three without and three within, which form a sort of bell-shaped flower that encloses the fruit, which is a kind of cone that has a stigma to each globosity. The filaments are numerous, and crowned with linear anthers, growing longitudinally to the sides of the filaments. The petals are of a greenish white, marked near the base with ochre yellow, and spotted with red, that gives them a fine appearance, particularly to look into; but they fall short of that gay appearance which most people expect at first seeing them, from the name being the same as that of the flower so celebrated for its gaudy colours. The flowers appear in July and August, but we know of no instance of their having ripened seed in this country.

The Hortus Kewensis notices the introduction of this tree into England, as long back as 1663; and Ray tells us, that it was cultivated by Bishop Compton, at Fulham, in 1668. When first it was raised in this country, it was kept in pots and tubs, and housed in the winter, it being supposed to be of too tender a nature to live in the open air; but in this state it made but little progress, whilst one that was planted amongst other trees, in a wilderness or garden of the of the Earl of Peterborough, at Parson's Green, near Fulhrm, by its growth soon convinced the gardeners of the mistake they had made. This was the first tulip-tree which flowered in this kingdom.

When the hardy nature of this beautiful tree was known, many were planted in different parts of the country, some of which have arrived to a large size, especially those that were set in a rich moist soil.

The finest of this kind that we have seen are in the gardens of the Earl of Egremont, at Petworth, in Sussex, one of which has a trunk, that at 7 feet from the ground measures 10 feet 3 inches in circumference; it then branches into seven limbs three of which are 5 feet 8 inches each in girth, and the other four limbs are 3 feet 9 inches each. The height of the tree is about 90 feet, and its boughs extend to a circle of 189 feet, or 63 feet diameter.

There are also some tulip-trees, of great bulk and beauty, at Wilton, the seat of the Earl of Pembroke; at Waltham Abbey, and many other places, in various parts of the country. The late Marquis of Londonderry took great delight in a tree of this kind, which grew on his lawn at Craysfoot, in Kent; where long may it remain, sacred, as a memento to mankind, that the most exalted situations are often the most perilous, and that happier hours may be spent under the shade of Liriodendron, than near the blazing splendour of a throne.

—— "Who, that lives,
Hath not his portion of calamity?
Who, that feels, can boast a tranquil bosom?
Mrs. Robinson.

Mr. Darby, at Hoxton, and Mr. Fairchild, are said to have been the first who raised tulip-trees in any quantity from seeds, and from them the gardens abroad were chiefly supplied. The original tree at Parson's Green is quite destroyed; not so much by age as by the other trees which were suffered to overhang it, and rob it of its nourishment, from a fear of taking them down, lest by admitting the cold air to the tulip-tree it would be injured.

The French gardeners notice the following varieties of this tree:—1st, Liriodendron acutiloba, with lobes acute, acuminated. 2nd, L. obtusifolia, with obtuse leaves. 3rd, L. integrifolia, with leaves entire. 4th, L. flava, yellow-flowered. This last variety deserves the preference, because its flower is larger, of a bright yellow, and sweet perfume.

These trees are propagated by seed, that is now annually imported from America; and it is also increased by layers; but these are commonly two or three years before they take root, and the trees so raised are seldom so fine as those raised from seeds; but, like all other stinted plants, they flower sooner. When raised from layers, we should recommend the branches to be ring-barked, which would facilitate the obtaining roots.

The tulip-tree prospers best in a light, loamy soil, not too dry.

A tree of such extraordinary stateliness and beauty deserves a place in every ornamental pleasure ground. It is a proper ornament for the park as well, and would, in this situation, become a more durable monument, to commemorate any local or family event, than those generally raised of stone or marble, whilst the difference of expence would be found to be as pence are to pounds.

## ARTICLE VI.

## ON THE CULTIVATION OF ORANGE AND LEMON TREES.

BY A TRAVELLER.

Recently I noticed in the Cabinet that advice was requested by a correspondent of Hull, as to a successful method of treating the Orange and Lemon trees. I have not the convenience of growing them, but having resided at Florence and other parts of Italy for three years, as well as in the south of France for two more, I have had, in my perambulations of pleasure, many opportunities of seeing the mode of treatment practised with them grown in the open air, and which produced the most gratifying results.

There are several modes of cultivating them, viz., against walls, and in large earth tubs, also trained as espaliers. The trees against walls and espaliers are grown in the natural soil, well enriched. They are always well attended in the dry seasons with water, occasionally applying liquid manure over the soil. The shoots are regularly thinned out, as is done to Peach trees in this country, retaining only just sufficient to produce a due proportion of fruit in every part of the tree. By proper attention to pruning, a number of small branchlets are produced, and on which, in general, the fruit is produced. The thinning of the shoots takes place first, when they have pushed two or three inches long, and a second thinning when it is rendered necessary from vigorous growth during summer. A third attention is paid to thinning, shortening, and duly securing during, what is termed, the season of rest. They thin the young green fruit judiciously at an early stage, regulating the quantity by the state of the tree, and never allow the fruit to remain long on the tree after it is fully ripe, otherwise the tree sustains much injury, being weakened thereby. Strong reeded covers half a foot thick are placed before the wall trees, and the espaliers have covers of the same to protect the trees in winter, air being admitted whenever practicable during the day. The plants in the earth tubs are removed into sheds, and similar places, during the same season. The covering, &c. is wholly removed as soon as can be safely done. Manure over the surface, &c. is then applied, and a spring regulation takes place.

The shoots of those trees grown in tubs are regularly thinned, shortened, &c. as is done to the wall and espalier ones. It is quite astonishing to see the difference that is produced by the attention of thinning and shortening the shoots, watering, &c., to what is the result when plants are allowed to grow naturally. The contrast in the fruit is most apparent; against the walls and espaliers it is more than treble the size.

I am persuaded if in this country, in conservatories and greenhouses, the training and pruning of the trees were adopted, similar beneficial results would follow, and much of the mortification and complaining of disappointment, both as to bloom and noble sized fruit, would be obviated. I am further of opinion, that a conservatory or greenhouse ought to be what is understood by a *warm* one, to be kept not lower than forty-five degrees during the coldest part of winter, and from sixty-five to seventy, or even more, during summer.

A friend of mine is trying the plan near Dublin, and I will forward the particulars at the end of the season, if spared to do so.

## ARTICLE VII.

# REMARKS ON INDUCING THE HYDRANGEA HORTENSIS TO PRODUCE BLUE FLOWERS.

BY CLERICUS.

Several admixtures of compost have been from time to time recommended in which to grow the Hydrangea hortensis, in order to cause it to bloom with *blue* flowers. I have tried all I have noticed, and the following is the most successful.

Very *fine* iron filings, and grinders dust (that is, the fine sandy substance that is found under the stone wheels of the knife-grinders) composing one part. Pure yellow loam from a hedge row one part, and another equal part composed of the same proportions of rotten leaf soil (or rotten wood) and bog peat. In this compost well incorporated, I put several plants which had only bloomed rose colour previously. The first season the flowers on every plant were of a pale blue. They were repotted in spring following in the same kind of compost, and the blossoms were of a much deeper blue. The third season they were of a rich blue, and have *invariably* been so every successive season. The rough drainage in the pots I formed of pieces of stone taken out of the yellow loam, and pieces of turf where the yellow loam was collected, with a handful or so of rusty pieces of iron nails intermixed. These formed the drainage, which was at least two inches deep.

It is certain that the iron filings cannot act directly upon the organism of the roots, but is gradually converted to an *oxyde*, by the decomposition of water, directly or secondarily by that of the vegetable contained in the compost. In either case it is not to be expected that the iron would be dissolved and conveyed through the sap vessels into the floral organs; unless, indeed, some vegetable acid were produced capable of acting upon the iron at the moment of its oxydation, and so form a soluble chalybeate salt. It is however evident that the plants absorbed a certain something from the iron, which became the direct agent in producing the change of colour. It is certain that however fine the filings of the iron may be, the particles cannot be absorbed in that state, they must therefore be so changed as to become soluble; or, by attracting oxygen from the moisture of the soil, and leafy remains, &c. be converted into an oxyde.

## ARTICLE VIII.

## REMARKS ON GROWING PLANTS IN GLASS CASES,

BY CALEDONICUS.

OBSERVING inquiries have been inserted in some recent Numbers of the FLORICULTURAL CABINET about Ward's glass cases for growing plants in, I am induced to offer some remarks upon them, and additionally to forward an extract on the subject from a paper which was read to the Botanical Society of Edinburgh.

The form of the case may be varied to suit the taste of the proprietor, and to be an ornament to the sitting-room, &c. The following is the detailed process of preparation of soil, &c., as read before the Society, the copy of which I subsequently obtained, and have transcribed.

### *Preparation of the Soil and Mode of Planting.*

The soil consisted of the following ingredients, which were placed in the box in the order now to be stated. Its bottom was covered with broken potsherds, to the depth of two inches, over which was spread one inch of very turfy loam; the remaining space in the box was filled with soil, composed of equal parts of peat and loam, with which a portion of rough white sand, amounting to about one-twentieth part, and free from iron, was mixed. After being planted, between three and four gallons of water were freely showered over the tops of the plants from a fine-rosed watering pot; this was continued till the water ran freely from two holes made in the bottom of the box for that purpose. After draining for twenty-four hours, the holes were tightly fitted with corks; and the glass roof, or cover, was then put on.

The case, with its plants, was placed at the window allotted for it. The window has a southern aspect, and the morning sun strikes upon it several hours in the day. During this period, the temperature within the case was several degrees higher than that in the room; while in the absence of sunshine, or when a fire was kept up, the temperature of the room was highest. At other times, when neither sun nor fire prevailed, the temperature within and without the case rose and fell simultaneously. At no period of the winter did the temperature in the room fall to the freezing point; nor, it is believed, rise in summer higher than to about 80°. No fresh water was given during the whole period; nor was the door of the case opened, but to remove a dead leaf or plant that had damped off. Once only was the cover taken off, in order to check the Lycopodium stoloniferum, which had grown so luxuriantly as to shade and injure the other plants.

### *Incident which suggested the Invention of the Case; with Remarks on the Mode in which a Smoky Atmosphere proves injurious to Vegetation.*

Having thus described the apparatus in which the plants were confined, the soil in which they have been grown, and the progress they have made under the peculiar conditions in which they have been subjected to the combined action of the several agents concerned in promoting vegetation, it is proposed next to consider how plants naturally inhabiting such different climes, and possessing such different characters, should be able, not only thus to live together, but to flourish in circumstances foreign, in many respects, to the native habits of all. Perhaps the best mode of dealing with this question will be, to compare briefly the conditions to which they are submitted in these close cases, with those to which they are naturally exposed in the free atmosphere.

Before entering on this investigation, it may not, however, be out of place to advert to the origin of the invention which has just been described. From his early youth Mr. Ward had been attached to botanical pursuits; but, living in a situation enveloped in the smoke of numerous manufactories, he had been compelled to give up the cultivation of plants, after many unavailing trials. At length, a simple incident put him on new experiments, and led him gradually to the results we are about to detail. He had buried the chrysalis of a sphinx in some moist mould, which was contained in a wide-mouthed glass bottle, covered with a lid. In watching the bottle from day to day, he observed that the moisture, which, during the heat of the day, rose from the mould, became condensed on the inner surface of the glass, and again fell back to the mould, so as to keep it always in a state equally moist. About a week prior to the final change of the insect, a seedling fern and grass appeared on the surface of the mould. After having secured the insect, Mr. Ward set himself to watch the developement of these plants in such a confined situation. He placed the bottle on the outside of the window of his study, where the plants continued to grow, and turned out to be the Poa annua, and Nephrodium Filix-mas. From this incident, so well improved by Mr. Ward, have arisen the results, both physiological and practical, which form the subject of the present communication. These results were published in the "Companion to the Botanical Magazine," edited by Sir W. J. Hooker, in May, 1836; but the incident which gave rise to them, and the experiments to which it led, occurred seven or eight years before, that is, about eleven years from the present time (1839.)

His previous want of success in growing plants in the ordinary mode, Mr. Ward attributes to the "depressing influence of the fuliginous matter with which the atmosphere in which he lives is impregnated." The real mode, however, in which such an atmosphere proves injurious to vegetation, was first shown by the experiments of Drs. Turner and Christison, which were published in the 93rd Number of the "Edinburgh Medical and Surgical Journal." They ascertained that it is not simply to the diffusion of fuliginous matter through the air, but to the presence of sulphurous acid gas, generated in the combustion of coal, that the mischief is to be ascribed. When added to common air, in the proportion of $\frac{1}{9000}$ or $\frac{1}{10000}$ part, that gas sensibly affected the leaves of growing plants in ten or twelve hours, and killed them in forty-eight hours, or less. The effects of hydrochloric, or muriatic acid gas, were still more powerful, it being found that a tenth part of a cubic inch, in 20,000 volumes of air, manifested its action in a few hours, and entirely destroyed the plant in two days. Both these gases acted on the leaves, affecting, more or less, their colour, and withering and crisping their texture, so that a gentle touch caused their separation from the footstalk; and both exerted this injurious operation when present in such minute proportions as to be wholly inappreciable by the animal senses.

After having suffered much injury from these acid gases, the plants, if removed in time, will recover, but with the loss of their leaves. Hence, in vegetation carried on in a smoky atmosphere, the plants are rarely killed altogether, but merely blighted for the season. Accordingly, in spring, vegetation commences with its accustomed luxuriance; and as in many situations there is, at that season and through the summer, a considerable diminution in the number of coal fires, there will be a proportionate decrease in the production of sulphurous acid gas; and, consequently, less injury will be done to plants during that season. In winter, too, when coal fires mostly abound, and gas is most abundantly generated, deciduous plants are protected from its noxious operation by suspension of their vegetating powers; but the leaves of evergreens, which continue to grow through that season, are constantly exposed to its action, when present in its greatest intensity. Accordingly, in many of the suburban districts around London, especially in the course of the river, where new manufactories are constantly rising up, the atmosphere is so highly charged with noxious matters, that many deciduous plants, and almost all evergreens, cease to flourish, or exhibit only a sickly vegetation.

In an interesting biographical sketch of his late lamented friend, Dr. Turner, Professor Christison confirms, by subsequent experience, the opinion formerly given respecting the noxious operation of the sulphurous and muriatic gases on plants; he describes their action as so energetic, that, in the course of two days, the whole vegetation of various species of plants may be destroyed by quantities so minute as to be altogether inappreciable by the senses. On two occasions he was able to trace the identical effects of the same kind of works (the black ash manufactory) on the great scale, which his friend and himself witnessed in their researches. In one instance, the devastation committed was enormous, vegetation being for the most part miserably stunted, or blasted altogether, to a distance of fully a third of a mile from the works, in the prevailing direction of the wind. Against the evils arising from such a vitiated atmosphere, the plan of Mr. Ward provides effectual protection, as the success of his own establishment amply demonstrates.

## *Condition of Plants, in regard to Water, in close Cases and in the free Atmosphere.*

In considering the conditions essential to vegetation, water may be allowed to claim the first place; for, if the vegetable exists in a state perfectly dry, neither the seed nor the plant can exert that action on the air which is essential for its developement and growth. It is "owing, therefore, to the prevention of the escape of the moisture within the cases, as Mr. Ward observes, that plants will grow in them for many months, or even years, without requiring fresh supplies of water: thus, the Poa and Nephrodium, above mentioned, grew for four years in the bottle without receiving one drop of fresh water, and would, as he believes, have grown as many more had they not perished from an accident." In vegetation in the free atmosphere, the fluids, which may be absorbed either from the soil by the roots or from the atmosphere by the leaves, are, in great part, exhaled and dissipated; but, in the plant cases, they are condensed on the inner surface of the glass roof, and fall back to the soil from which they were raised. In this way, both the soil and atmosphere possess always sufficient humidity to carry on vegetation.

[*To be continued.*]

# PART II.

## LIST OF NEW AND RARE PLANTS.

BARBACENIA SQUAMATA. SCALY. (Pax. Mag. Bot.) Bromeliacea. Hexandria Monogynia. Seeds of this new plant were sent from Brazil to Messrs. Veitch's, of Exeter, with whom it has bloomed. It is an herbaceous perennial. The flowers in form somewhat resemble those of a moderate sized Fuchsia. The three exterior limbs and tube of the blossom of an orange colour, and the three inner ones of a crimson red. The foliage is of a grassy character, and the flower stems rise about eight inches high. It is a very pretty and interesting species.

BERBERIS TENNIFOLIA. THIN ASH-LEAVED BERBERRY. (Bot. Reg. 26.) Berberacea Hexandria Monogynia. A very rare species discovered by Mr. Hartweg, in Mexico. It is too tender to do well in this country in the open air, but thrives in a greenhouse, or coal pit, protected in severe winters. It blooms from October to December, the flowers being fragrant, of a light yellow, in racemes about one foot long.

CEREUS PITAJAYA. VARIABLE CEREUS. (Bot. Mag. 4084.) Cactæa. Icosandria Monogynia. A native of Carthagena, Peru, and Brazil. It is an erect growing plant. The flowers, including the tube, are about nine inches long. The petals are white, and the mouth of a flower about five inches across.

CYMBIDIUM PENDULUM, VAR. BREVILABRE. SHORT-LIPPED. (Bot. Reg. 24.) Orchidaceæ. Gynandria Monandria. This variety was discovered by Mr. Cuming, at Sincapore, and forwarded to Messrs. Loddiges, with whom it has bloomed. Sepals and petals yellowish-green, streaked with a dull red. Labellum rose, with a yellow blotch at the centre, and a white margin.

DRYMONIA PUNCTATA. SPOTTED-FLOWERED. (Bot. Mag. 4089.) Gesneriaceæ. Didynamia Angiospermia. Introduced into this country from Guatemala, by the London Horticultural Society. It is a subherbaceous plant with creeping hairy stems. The flower is tubulous an inch long. The spreading limbs of the blossom is an inch across, with fringed edges. Of a pale yellow primrose colour numerously spotted with purple. It grows freely in a wire basket, in the moist stove, in the Royal Gardens, at Kew.

ERICA MURRAYANA. MR. MURRAY'S HEATH. (Pax. Mag. Bot.) Ericaceæ. Octandria Monogynia. A beautiful hybrid, raised from seed by Mr. A. Turnbull, of Bothwell Castle Gardens, near Hamilton, in Scotland, and who has named it after his friend Mr. Murray, of the Glasgow Botanic Garden. It was produced from seed, between E. aristata minor, which is a dwarf compact grower, and E. vestita coccinea, the former being impregnated with the pollen of the latter. The variety raised has realized the intended object, being compact, and the flowers of a rich crimson red, produced in terminal heads.

BOLBOPHYLLUM CALAMARIA. QUILL-STEMMED. (Bot. Mag. 4088.) Orchidaceæ. Gynandria Monandria. An Orchideous Epiphyte, which has been received from Sierra Leone, by John Gray, Esq., of Greenock. The flowers are produced in a spike, the stem being a foot high. The flowers are yellow, having the lip of a deep blood-purple colour, much fringed. Each blossom is about an inch across, having very narrow petals and sepals.

**Eria bractescens. Long-bracted.** (Bot. Reg. 29.) Orchidaceæ. Gynandria Monandria. Discovered at Sincapore by Mr. Cuming. The raceme of flowers is about six inches long, erect. Each blossom is about three quarters of an inch across. Sepals and petals white, with a small crimson lip, having a white end.

**Hibiscus Cameroni-fulgens.** An hybrid raised between H. cameroni and H. fulgens. It is a handsome variety. Each blossom, single, is five inches across, of a rich crimson colour. It well deserves a place in the hot-house.

**Lindleya mespiloides. Medlar-like.** (Bot. Reg. 27.) Roseaceæ. Icosandria Pentagynia. A small evergreen tree, much like Mespilus grandiflora, but with flowers as sweet as the Hawthorn. It is as hardy as an Escallonia. Each flower is about an inch and a half across, white.

**Macleania longiflora. Long-flowered.** (Bot. Reg. 25.) Vacciniaceæ. Monadelphia Decandria. Said to be a native of Peru. It requires in this country to be grown in a warm greenhouse. It is a neat compact evergreen shrub, growing to the height of five feet in its native situation. The flowers are produced from the axils of the leaves, usually in threes, and numerously along the shoots, so as to form pretty spikes. Each flower is tubulous, an inch and a half long, of a deep orange-red colour, much like a Bouvardia triphylla in form and appearance. It deserves a place in every greenhouse.

**Pentas carnea. Flesh-coloured.** (Bot. Mag. 4086.) Rubiaceæ. Pentandria Monogynia. (Synonym Sipanea carnea.) A native of Africa, said to have been gathered at Accra, by some person in the Niger Expedition. It is a stove plant of much beauty, somewhat in appearance like a Melastoma. The plant grows a foot high, scarcely shrubby, branches herbaceous. The flowers are numerously produced in terminal large corymbs of a delicate purplish-flesh colour. Each blossom is near an inch across. It continues to bloom nearly all the year. It well deserves a place in every stove.

**Statice pseudo-armeria. False-thrift.** (Pax. Mag. Bot.) Plumbaginaceæ. Pentandria Pentagynia. It is an herbaceous perennial plant. Like the well-known common Thrift, it blooms in large globose heads, of a rich rose colour. It is an ornamental plant for the greenhouse, and well merits a place there; and in summer will flourish well in the open bed of the flower garden,—and in masses would look well. It is to be obtained of the principal nurserymen.

## New Plants noticed in Botanical Register not figured.

**Astyria rosea.**—A native of the Mauritius. It is a beautiful flowering hothouse plant, and has bloomed in the collection at Syon Gardens. The flowers are produced in large panicled heads, of a pink colour.

**Hypocalymma suavis.**—From the Swan River Colony. It is a sweet-scented, graceful, greenhouse shrub; the flowers are white.

**Andromeda phillyreæfolia.**—In habit it is much like a broad-leaved Andromeda polifolia. It is a narrow leaved evergreen, greenhouse plant. The flowers are white. It has bloomed with Messrs. Loddiges.

**Oncidium lacerum.**—It has very much the habit of O. longifolium, but the flowers are more dense. It has bloomed in the collection of Messrs. Loddiges.

## *Plants noticed in Nurseries, &c.*

**Aristolochia Gigas.**—We formerly remarked upon the singular flowers of this plant, and having recently seen it in bloom in the Horticultural Society's garden, we find it to exceed the description formerly given of its singularity. The flower has a leathery appearance, and half a yard across; of a dull cream colour, numerously veined with purple, which intersect each other beautifully. Around the tube of the flower the colour is of a deep rich velvet purple. It has a disagreeable putrid scent. The plant is a climber, and requires to be in a hot-house, or warm conservatory.

**Hovea trisperma.**—It is a slender growing plant, but blooms freely; the flowers are of bright lively violet colour. It is in bloom at Messrs. Henderson's.

Hardenbergia monophylla variegata.—The leaves have large irregular blotches upon them, and so varied that not two leaves are alike, and produces a very interesting appearance. It is in the collection of Mr. Jackson, nurseryman, of Kingston, and well deserves a place in every greenhouse, as an interesting and pretty climbing plant.

Pimelia hypericina.—The flowers are white, with deep orange-coloured anthers, very neat and pretty. By pinching off the tips of the shoots the plant can be kept bushy. It is in the collection of Mr. Lee, of Hammersmith Nursery.

### *In the Conservatory of the London Horticultural Society's Garden.*

Templetonia glauca.—A fine specimen, six feet high, in fine bloom; its pretty, rich, red, and buff pea-formed flowers, rendering it very showy.

Genista canariensis has been in most profuse bloom for two months, the numerous showy yellow flowers producing a very cheerful and gay appearance. It is a very pleasing, spring-flowering plant, and continues to bloom a considerable part of summer too.

Scabiosa pumila.—A dwarf-growing plant, with white flowers, very neat and pretty.

Hoytzia mexicana.—The tube of the flower is an inch long, red on the outside, and white within. They are produced in long spikes; a very pretty greenhouse plant.

Cytisus filipes.—A fine bush, eight feet high, in amazing profusion of bloom, its neat pure white flowers giving it a very interesting appearance.

### *At Mrs. Lawrence's, Ealing Park.*

Gompholobium polymorphum luteum.—The flowers of a pretty rich yellow, and the plant grows more bushy than the original species.

Gompholobium.—A new species, said to have scarlet flowers.

Plagiolobium ilicifolium.—Not yet bloomed.

Gompholobium splendens.—New, spoken very highly of.

Correa rubioides.—The flowers are red and scarlet, very handsome.

Chilodia scutellarioides.—The flowers are like those of a small salvia, of a lilac-purple colour. It is a neat greenhouse plant.

Rondoletia longiflora.—Not yet bloomed.

Sauraja spectabilis.—The flowers are white, produced in panicles like those of a horse chestnut; a fine plant.

Acrophyllum venosum.—The flowers are like those of Spirea Japonica.

Kennedya ovata.—The flowers are of a pretty purple.

Habrothamnus fasciculatus.—Like a Burchellia capensis, the flowers are produced at the axils of the leaves, but they are of a richer red colour.

Plumbago capensis.—This plant is generally to be seen growing a long and straggling plant, but by stopping the leads it can be formed so as to be a neat bush, and blooms beautifully.

Hydrangea Japonica.—The plant was not in bloom, but said to be white.

Asclepias Curassavica.—Several of the Cassias and other plants had been similarly treated, and though naturally becoming long and unsightly, by this attention they had become dwarf bushy plants, and when in bloom appeared much handsomer. The treatment of stopping the leads had commenced with the plants when young, and so very different in appearance were they as scarcely to be like the family.

Azalea.—A splendid double crimson-red.

Ericas.—The numerous collection of nearly all the best sorts were in fine condition. The plants dwarf-bushy, healthy, and in fine bloom. The best plants were those grown in frames that were raised about six inches from the ground by bricks under the corners; this opening in fine weather admits a current of air through the entire frame. In cold weather the space is closed up; this plan is the best for producing robust, neat plants. Any sort that does not naturally grow bushy, and it is desired to have it such, the leads of the shoots are pinched off.

# PART III.

# MISCELLANEOUS INTELLIGENCE.

## QUERIES.

*To the Editor of the Floricultural Cabinet.*

SIR,—Can you give me a list of three or four evergreen hardy thick-growing shrubs fitted for a shrubbery, rather exposed, excepting the Laurestina, the Bay, and the Arbutus? What mode is there for making the grass cut from a lawn available in horticulture or agriculture besides the use commonly made of it for a hot-bed?

Faithfully yours,
M. N. O.,
April 15, 1844. A Subscriber of Two Years' standing.

## REMARKS.

THE EXHIBITION AT THE ROYAL BOTANIC GARDENS, REGENT'S PARK, took place on Tuesday, April 30th. It far exceeded any former one in the display of very numerous well-grown specimens, which brought together a great concourse of visitors. The Queen and Prince Albert honoured the Society by their presence before the general visitors.

*For a Collection of forty Stove and Greenhouse Plants.*—AMATEURS.—1st Prize, Mr. Hunt, gardener to Miss Traill, Hayes-place, near Bromley. Among other fine-grown plants were the following:—Ixora coccinea, Chorozema cordata, Erica Hartnelli, Leschenaultia formosa, Pimelea decussata, Hovea Celsii, Boronia serrulata; several well-grown Azaleas, Tropæolum tricolorum, &c.

NURSERYMEN.—1st Prize, Mr. Catleugh, Chelsea. Among other fine specimens, it contained Azalea variegata, a noble plant; Azalea alba superba, Erica Willmoreana, Pimelea decussata, a large and splendid specimen; several fine Cactuses, Calceolaria violacea maculata, Azalea congesta, fine rose colour; Azalea constantia, fine rose, &c.

*For a Collection of twenty Stove and Greenhouse Plants.*—AMATEURS.—1st, Mr. Barnes, gardener to G. W. Norman, Esq., Bromley-hill. Among other fine plants were, Erica Mundula, in profuse bloom; Boronia denticulata, Aphelexis humilis, Correa speciosa, Leschenaultia formosa, Erica odorata.

NURSERYMEN.—Mr. Pawley, White Hart, Bromley. Among other fine plants were Hovea Celsii, Cytisus racemosus, Tropæolum tricolorum, Pimelea decussata, Boronia serrulata, several fine Azaleas, &c.

*For ten Stove and Greenhouse Plants.*—AMATEURS.—Mr. May, gardener to E. Goodheart, Esq., Beckenham. It contained Erica Hartnelli, Aphelexis humilis, &c.

*For a Collection of six Stove and Greenhouse Climbers.*—Mr. Frazer, of Lea Bridge. Among which were fine specimens of Hardenbergia monophylla, H. macrophylla, Kennedya villosa, Tropæolum tricolorum, &c.

*For best Collection of Cinerarias.*—Mr. W. Taylor. The sorts were, Queen Victoria, Azurea, Eclipse, King, Rival King, Favourite, Triumph, Lady Cavendish, Victoria Regina, Emperor, Miss Hankey, Pride of Peckham.

*For best Collection of twelve Pelargoniums.*—1st Prize, Mr. Dobson, gardener to E. Beck, Esq., Isleworth. The sorts were, Luna, Meteor, Susanna, Lord Chancellor, Evening Star, Erectum, Martha, Zanzummim, Brunette, Serjeant, Charmer, and Purpuream. Dwarf, well-grown specimens.

*For best Collection of twenty Roses in Pots.*—Mr. Dobson. The sorts were, Caroline, Hamond, Phœnix, Miranda, Cramoise superieure, Madame Newman, Armosa, Belle Allamande, Nouvelle Heliose, Zobiede, Triomphe de Luxembourg, Eliza Suavage, Queen of the Bourbons, Eugene Dubourg, Therese Stravens, White odorata, Hardy, Madame Bosanquet, Theresa Stravens, Stadtholder.—2nd Prize, Messrs. Lane and Son. *Tea Roses:* Blush, Lutescens grandiflora, Levison Gower, Belle Allamaude, Caroline, Hardy, Eliza Suavage.

—*China:* Cramoise superieure, Abbe Newland, Icteros, Fabrier, Eugene Beauharnois.—*Bourbon:* Armosa, Phœnix, Theresita, Queen, Hybrid purpurea, W. Jesse, Queen Victoria, Fulgorie. Both collections were well grown; but the former plants were the larger.

*Seedling Pelargoniums.*—Mr. Dobson. 1st. Master Peel, lower petals rosy-purple, terminating to the centre to a clear white; upper petals rosy-purple having a large dark-velvet blotch, of fine form.—2nd. Lurida, rosy-scarlet, with a dark blotch on the upper petals; of good form, and a very attractive flower.—3rd. Chastity, the lower petals of a beautiful delicate pink, the upper ones having a deep maroon blotch, edged with pink; of good form.

*Best Heartsease.*—Mr. Brown. Arethusa, Ceres, Cinderella, Fancy, Bella, Curion, Viceroy, Maid of the Mill, Modesty, Cotherstone, Elect, Vivid, Superb, Captain Boldero, Eclipse, Prospero, Jehu, Warrior, Beauty of Bucks, Sulphurea elegans, Exquisite, Cook's Mulberry, Rob Roy, Jewess, Duchess of Beaufort, Imogene, Bathonia, Purple Perfection, Prince Albert, Regulator.

*Seedling Azaleas.*—1st Prize, Mr. Pawley. Carminata, a deep rich colour. —2nd, Mr. Falconer. Emmelina, a light-coloured flower.—3rd, Mr. Catleugh. Erecta, a brilliant rosy-carmine. Also an extra Prize for Gloriosa, a bright rosy-crimson.

*Greenhouse Azaleas.*—Mr. Smith, of Norbiton. Azalea alba superba, coruscans, punctata, decora, impressa, mirabilis, ardens, semiduplex coccinea, amabilis splendens, phœnicea alba, bicolor nova, magniflora plena. Also for three seedlings, Pallida, Elegans superba, and Rosea superba.

*Seedling Rhododendrons.*—1st Prize, Mr. Smith, of Norbiton. Very beautiful, in varied colours, ranging from lemon to deep buff, finely spotted. An extra prize was given to Mr. Wells, of Redleaf, for a collection of cut blooms; the kinds very superior, the colours ranging from white through various shades of pink, rose, to crimson; finely spotted. Mr. Gaines's Mirabile is of a rosy-crimson when in bud; it continues to vary in shade till it becomes white, and is beautifully spotted.

*Single Specimens.*—Cyrtopodium punctatum, from the garden of Sir George Staunton. The plant was in most vigourous health, the leaves extending to six feet high, and the fine bright flowers equally superb.

There were several collections of Orchideous plants. Mr. Hunt obtained the first prize. In the collection were fine specimens of Epidendrum crassifolium, Oncidium Devonia, O. amplicatum, Calanthe varatrifolia, Phacus grandifolius, Cattleya Forbesii. Mr. Bruce had Cattleya Mossiæ, and a splendid specimen of Maxillaria Harrisonia, Oncidium luridum. Mr. Dawson, of Brixton-hill, exhibited a fine specimen of Erica propendens. Mr. Forest, Statice macrophylla. Mr. Hunt, a new Gesnerea from Mexico. Mr. Smith, Azalea speciosissima.

In the collections of stove and greenhouse plants there were several other exhibitors, who showed splendid collections, and had prizes awarded; but we could not get the names of the specimens for insertion here; but of the first collections we insert the prime. Altogether it was a splendid exhibition.

## LONDON HORTICULTURAL SOCIETY.

May 7th. From Messrs. Loddiges, of Hackney, were Dendrobinm Heyneanum, in good condition; Masdevallia infracta; a fine plant of Camarotis purpurea, in excellent health; together with the beautiful Cattleya Skinneri, and a remarkable specimen of Dendrobium densiflorum, having many bunches of beautiful Orange-blossoms. A Knightian medal was awarded for these. Mr. Plant, gardener to J. H. Schroder, Esq., sent a fine Aerides crispum, producing a fine spike of purple and white flowers. A Banksian medal was awarded for it. From Mr. Robertson, gardener to Mrs. Lawrence, was a collection of plants, containing a dwarf bushy specimen of Chorozema Dicksonii; a beautiful large Hovea Celsi, with very bright-coloured blossoms; Dendrobium aggregatum, in good condition; Tetranema Mexicanum, a pretty greenhouse herbaceous plant; and a good Russelia multiflora, which is one of the gayer of tender greenhouse plants. In the same collection were also a large Pimelea hypericifolia; Lalage [illegible]; Epacris lavigata, covered with white blossoms; Adenandra amœna; Daviesia saligna; and a variety of Hardenbergia monophylla. A Knightian medal was awarded for the four first-named plants. From S. Rucker, Esq., was a variety (?) of Anguloa Clowesii, having large yellow flowers richly spotted in the interior with brown. This is a rare species of that hitherto almost unknown genus. A Banksian medal was awarded for it. Mr. Carson, gardener to W. Farmer, Esq., sent a variety of Epidendrum macrochilum roseum, having a fine raceme of pale violet blossoms. A certificate was awarded for it. From Mr. Glendenning, of Turnham Green, was a small plant of Pentas carnea, which is a scarce greenhouse plant, from South Brazil, having pale green leaves and delicate lilac blossoms; also an Indigofera, apparently incana, a plant with trailing stems, covered with gray foliage, which contrasts well with the deep purple flowers. Mr. W. P. Ayres, gardener to J. Cook, Esq., also sent Pentas carnea, for which a certificate was awarded. From J. Allnutt, Esq., was a good plant of Chorozema varium. Mr. Pawley, of Bromley, sent a Seedling Azalea, named carminata, having large rather dull red blossoms. From Messrs. Veitch and Son, of Exeter, was an Oxalis that was sent from Chili by their collector, Mr. Lobb. It is new to gardens, and will, no doubt, be an acquisition, as it is stated to be hardy, having survived all last winter, planted out on rockwork. A certificate was awarded for it. Mr. Mountjoy, of Ealing, sent a Seedling Calceolaria, considered to be an improvement on Lady Constable, two Seedling Pansies (named Princess Alice and Prince of Wales), and a collection of Pansy blooms. From Mr. Errington, gardener to Sir P. Egerton, Bart., was a series of flowers of Seedling Cacti, in which one, named Regalis, resembling Conway's Giant, was a very large fine flower; another named Longissima, on account of the length of the tube, was a flower of considerable size and beauty; and several others gave great promise;—a certificate was awarded for these.

## THE LONDON HORTICULTURAL SOCIETY'S EXHIBITION OF FLOWERS, &c., HEL IN THE GARDEN ON MAY 18, 1844.

*Pelargoniums.*—1st Prize, NURSERYMEN, for 12, Mr. Gaines. Grown in pots 12 to the cast. Coronation, Nymph, Juba, Grand Monarch, Emperor, Cyrus, Rising Sun, Mabel, Comte de Paris, Grand Duke, Sylph, and Victory.

2nd Prize, Mr. Catleugh, Sylph, Unit, Witch, Coronation, Ovid, Una, Jubilee, Madeline, Favourite, Cyrus, Tasso, and Maid of Honour.

1st Prize, AMATEURS, for 12 new and first-rate varieties, grown in 24-sized pots, Mr. Cock, of Chiswick, Lord Chancellor, Hebe, Emma, Erectum, Symmetry, Sylph, Madame Taglioni, Gipsey, Rachael, Unit, Wizard, and Maid of Honour.

2nd Prize, Mr. Dobson, gardener to Mr. E. Beck, Isleworth. His collection comprised Flora, Lord Chancellor, Luna, Cleopatra, Leonora, Susanna, Angiola, Favourite, Bella, Matilda, Dido, and Sir R. Peel.

3rd Prize, Mr. Stains, for Ivanhoe, Jubilee, Lady Sale, Queen of the Fairies, Fair Maid of Devon, Superbum, Hebe, Rising Sun, Coronation, Enchantress; Duchess of Sutherland, Priory Queen.

1st Prize, for 12, grown in pots 12 to the cast,—Mr. Cock, Lord Chancellor Nestor, Eclipse, Cyrus, Queen of Fairies, Sylph, Tasso, Jubilee, Madeline, Juliet, Emma, Unit.

2nd Prize, Mr. Bell, of Chelsea Hospital, Mrs. Sterling, Comte de Paris, Sylph, Coronation, Victory, Priory Queen, Lord Mayor, Grand Duke, Climax, Prince Albert, Una, and Maid of Saragossa.

1st Prize, for 12, grown in 24-sized pots,—Mr. Gaines, Duchess of Sutherland, Lady Prudhoe, Lady Duncan, Vanguard, Augusta, Rising Sun, Lady Sale, Lydia, Ackbar, Coquette, Lady Mildmay, and Imperiale.

2nd Prize, Mr. Catleugh, Jubilee, Eclipse, Hebe, Camilla, Madeline, Symmetry, Tasso, Unit, Sir R. Peel, Emma, Duchess of Sutherland, and Wizard.

*Seedling Pelargoniums.*—The early period did not admit of many. There were the following exhibited by Mr. Whomes, gardener to E. Foster, Esq., named Dr. Lindley. The flower is fine in form, with bright, deep rose-coloured under petals, small white centre, with large dark blotch on the upper petals, leaving but a narrow margin of bright rose. Another seedling attracted much attention it is a flower rather deficient in form, but possessing extraordinary depth and richness of colour of a peculiar quality; it was regarded with much interest by amateurs, who speculated upon the influence such a flower would have in future upon this favourite class. In Mr. Beck's collection we noticed two fine seedlings, Arabella and splendens; the former a rosy flower with a white centre, the latter a high and brilliant-coloured variety.

*Cinerarias.*—1st Prize, Mr. Ivery, of Peckham. Pickwick, Regina Victoria, Seedling, King of Prussia, Emperor, Prince of Oldenburgh, True Blue, Laura, Nosegay, Eclipse, Triumph, Pride of Peckham.

*Roses grown in Pots.*—AMATEURS.—1st Prize (for 12), Mr. Dobson, gardener to E. Beck, Esq. They were grown in slate pots, were from one foot six inches to two feet six inches high, and as regularly covered with bloom and foliage as could possibly be desired. The finest varieties consisted of Earl Talbot, rose colour; Great Western, bright rose, blotched with white; Charles Duval, flesh coloured; Emerance, white, with yellow centre; Rouge Superbe, dark rose colour; Armosa, Devoniensis, Madame Neuman, rose colour; and Triumphant.

2nd Prize, A. Rowland, Esq. Jaune, cream colour, with yellow centre; Richelieu, rose colour; Vanilla, Eugene, Archduke Charles, Goubault, flesh colour; and Madame Plantier.

NURSERYMEN.—1st Prize, Messrs. Lane and Sons. The plants were dwarf, clean, rich, and good, and in every respect superb examples of fine cultivation. The most distinct and desirable kinds were Theresa Isabella, cream colour; Comte de Paris, rose; Edward Jesse, rose; Aricie, flesh colour; Speciosa, rose; Madame Laffay, rose colour, very fine; La Pactole, light yellow; Barbot, fawn colour; Armosa, flesh colour, very fine; Grand Capitaine, Taglioni, Bourbon Theresita, Arago, Triomphe de Flora, Paris, and Psyche.

2nd Prize, Mr. Laing, Twickenham. French and hybrid China varieties, kinds more difficult to manage in pots than the Chinese and Tea-scented varieties. They were, however, highly-creditable specimens. The most remarkable kinds were General Allard, dark rose colour; General Lamarque, dark velvety purple; Beauty of Billiard, dark red; Belle Marie, rose colour, very large; Picotee, rose, striped with white; Nouvelle Bourbon, rose colour; Celestine and La Renommé,—a fine white variety.

*Collections of Cut Roses* were shown by A. Rowland, Esq., Messrs. Lane and Sons, and Mr. Mitchell, nurseryman, of Piltdown. In the collection of the latter gentleman were unusually fine flowers—Aurora, Belle Allemande, Odorata, Princess Hélène, Archduke Charles, Original, Virginian, and Taglioni. Mr. Mitchell also showed a new Rose, called Lamarque Superbe, and said to bloom as early as the White Banksian. It is a flower of fine proportions, of a delicate creamy-white colour, very large and very double, with a petal of fine substance.

*Calceolarias.*—NURSERYMEN.—1st Prize, Mr. Gaines. Sunbeam, Ackbar, Magnet, Mag. Grandiflora, Candidate, Lady of the Lake.

AMATEUR.—1st Prize, Mr. Stanley, gardener to H. Bevens, Esq. Ariel, Warrior, Sir R. Peel, Fairy Queen, Compacta, and Village Maid.

OF NEW PLANTS.—A new species of Hindsia, exhibited by Messrs. Veitch and Sons, of Exeter. A strong-growing plant with the habit of a Melastoma, blooming freely, producing flowers of a bluish lilac colour, and five times as large as Hindsia (Rondeletia) longiflora. A species of Centrosema, producing bright scarlet pea-formed flowers; should it produce flowers as numerous as they are beautiful, it will indeed be a splendid object. Cereus crenatus, exhibited by Mr. Booth, gardener to Sir C. Lemon, Bart. The plant in habit resembles C. Jenkinsoni; the flowers are large, of a palish-straw colour, tinged with green, and bears a close resemblance to the old night-blooming Cereus. A new species of Hibbertia, of shrubby habit, producing yellow flowers, raised from Swan River seeds, was sent by Mr. Noble, gardener to R. Mangles, Esq. From Messrs. Loddiges, a species of Gaylussacia—an evergreen greenhouse shrub, with deep rose-coloured flowers, like those of a Vaccinium, to which the genus is allied.

CLIMBING PLANTS.—Mr. Robertson, gardener to Mrs. Lawrence, Manettia cordifolia, trained on a large globular trelis, completely covered with branches and flowers; Manettia bicolor, trained spirally to the height of four feet, well flowered; Hardenbergia Comptoniana, trained over a barrel-shaped trellis, was in profuse bloom. Hardenbergia monophylla Zichya inophylla floribunda; and Gompholobium polymorphum, a noble plant of Stephanotus floribundus, trained spirally; the trellis covered as thickly as possible with branches, and singularly thickly covered with bloom-buds, though but few of them were open. Echites hirsuta; several plants of Gompholobium polymorphum in good condition; and Tropæolum tricolor and Jarrattii. Mr. Frazer, two exceedingly well-bloomed plants of Hardenbergia monophylla and longiracemosa, trained over cylindrical trellises; Zichya coccinea, and Gompholobium polymorphum; Sollya angustifolia; Philibertia grandiflora, trained on a flat trellis.

*Large Collections of* 30 *Stove and Greenhouse Plants.*—1st Prize, Mr. Robertson, gardener to Mrs. Lawrence. Among which were superb specimens of Erythrina crista-galli, 9 feet high and 18 feet in circumference, in noble bloom; Cytisus filipes; Boronia pinifolia; Pimelea spectabile; Chorozema Henchmanni, 4 feat high and 12 feet in circumference; Pimelea decussata, 6 feet high, and as much in diameter; another, a dark variety, 18 inches high, and 3 feet in diameter; Eriostemon myoporoides, 9 feet high, covered with bloom; Polygala bracteolata; Eriostemon buxifolium; Epacris ceræflora; Coleonema tenuifolium; Chorozema macrophylla; Hovea Celsi, an old plant, which had been cut down and produced a number of branches from the bottom, which formed a dwarf bush; Dillwynia floribunda; Aphelexis sesamoides; a few species of Daviesia, with a profusion of orange and dark-red flowers; Tabernæ-montana coronaria, densely covered with its pure white deliciously-scented flowers; Leschenaultia biloba, 4 feet high, and 4 feet in diameter, regularly furnished with a great number of delicate azure-blue flowers.

*Collection of Fifteen Plants.*—1st Prize, Mr. Green, gardener to Sir E. Antrobus, Leschenaultia biloba grandiflora, dark blue variety, covered with bloom, and four feet high, the same in diameter. L. formosa covered with bloom; Daviesia latifolia, trained in a pendent form; Gnidia pinifolia; Pimelea rosea and hispida; Chorozema varium well bloomed; Acrophyllum venosum, in a very healthy condition, blooming freely; Aphelexis humilis in a fine state; Rondeletia speciosa.

2nd Prize, Mr. Clark, gardener to the Earl of Eldon, a large plant of Boronia denticulata; a double white Primula, Eutaxia pungens, Chorozema Dicksoni, and Leschenaultia biloba; Chorozema cordatum, nine feet in diameter; Stephanotus floribundus, Zichya inophylla, floribunda, and coccinea; Hardenbergia monophylla, trained on flat trellises, densely clothed with flowers.

*Single Specimens.*—Hindsia longiflora loaded with bloom buds: Xanthosia rotundifolia, Eriostemon buxifolium, and Erica depressa. It was about two feet high, and two feet in diameter at the bottom, forming a cone densely covered with greenish-yellow blossoms. From Messrs. Veitch's, Cumingia trimaculata, sent by Mr. Frost; three plants of Statice macrophylla, in bloom, from Mr. Forrest; a very large plant, sheeted with bloom, of Leschenaultia formosa, was sent by Mr. Clark; a splendid specimen of Leschenaultia biloba grandiflora, by Mr. Falconer; another plant with paler flowers, by Mr. P. Tramer, gardener to Lady Alice Peel; and a pretty specimen of the dwarf variety, called L. biloba nana, by Mr. Green. From Mr. R. Johnson, gardener to J. Mallett, Esq., Gnaphalium involucratum; Stylidium odoratum, from Mr. Robertson; new Gloxinia with crimson flowers edged with white, far the finest hybrid which we have seen, and merits universal cultivation, from Mr. Dobson.

ON GERANIUMS.—When I housed my Geraniums last winter, I accidentally placed side by side a Horse-shoe Geranium and one with variegated foliage; and this spring I find upon the latter one shoot having exactly the same foliage as its neighbour; and the young leaves which continue to make their appearance partake of the nature of the horse-shoe, and not of the parent Geranium. If some reader of the CABINET would tell me how this has arisen, and if the alteration will be permanent, or if, when the leaves change, the shoot will return to its old habit, I should feel obliged. MARTHA.

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THE

FLORICULTURAL CABINET,

JULY 1st, 1844.

# PART I.

## EMBELLISHMENTS.

## ARTICLE I.

### EPACRIS MINIATA.

This new and beautiful Epacris has been obtained by Messrs. Loddiges, of Hackney Nursery, London, from Van Diemen's Land; and they exhibited a fine plant, in most profuse bloom, at the London Horticultural Society's rooms, in Regent-street, on June 4th, for which the silver medal was awarded; and again at the show in the gardens, on the 15th. It was generally considered to be the gem of the new plants then exhibited; and a celebrated plant grower offered to give 100*l*. for it, should it be the only plant in the country, or to include any stock raised from it. The habit of the plant is somewhat after the manner of the E. grandiflora, not quite so robust, but more branching and bushy. It blooms very profusely, and appears to be likely to bloom for several successive months. It deserves to be in every collection of greenhouse or conservatory plants.

### PENTAS CARNEA.

(Synonym Sipanea carnea.)

This new plant belongs to the Pentandria class of plants, and the natural order Rubiaceæ. It is a soft-wooded shrubby plant, having somewhat the appearance of a Melastonia, the handsome delicate flowers being produced in numerous terminal cymes. It is supposed to be a native of Africa, and requires to be grown in a warm greenhouse, or a plant-stove. It grows about a foot high, and we have seen it almost covered with heads of its lovely flowers. It appears to be very easy of culture, somewhat in the way of a Ruellia, and very likely to bloom through the spring and summer months.

## ARTICLE II.

## FLORICULTURAL GLEANINGS.—No. 15.

### ADDITIONAL POLYANTHUS DESCRIPTIONS,

BY MR. WILLIAM HARRISON, SECRETARY TO THE FELTON FLORISTS' SOCIETY.

### CRAIGGY'S TIMANDRA, *alias* CRAIGGY'S HIGHLAND MARY.

CRAIGGY'S Timandra, or Highland Mary, is a magnificent variety of this lovely tribe of spring visitors, and is a desirable addition to the most select collection. The tube is most beautifully elevated above the level of the eye, the eye itself is a fine rich yellow, the ground-colour a beautiful rich darkish crimson, and the lacing perfect upon a truss of ten pips. This truss took the fourth prize at the Felton exhibition, on the 7th of May, the first three being taken by very fine blooms of Pearson's Alexander, Maud's Beauty of England, and Clegg's Lord Crewe. It also won the medal at the Newcastle Horticultural Meeting, two years ago, beating Pearson's Alexander and the much-talked-of Nicholson's Bang Europe, and may therefore be fairly considered to have established its character as one of the finest varieties yet known. At Newcastle, this spring also, it carried off the same honour. It is a prolific trusser, my plant having thrown me up no less than four fine trusses, one of which is that commented on above. It is a diamond of the first water, and is rapidly finding its way into various parts of the kingdom, having been sold out, after its success this spring, at 10*s*. a plant. I cordially recommend it to the attention of the fanciers of the Polyanthus, as a new variety which has been well tested, and which has received "golden opinions from all sorts of people."

### COLLIER'S PRINCE REGENT.

This is another pretty and very distinct variety of the red-ground class. The tube is finely elevated above the eye, which is of a pure stainless yellow, and very circular. The ground is a very bright rich crimson, which renders it quite distinct from all others, and the lacing light and very correct on the whole corolla. It is one of the most attractive red-grounds that I have seen, being totally distinct from all others. It seems not to be known farther south, as I have not met with it in any of the southern catalogues; but it is highly esteemed in Scotland, from which quarter I received it.

### NICHOLSON'S BANG EUROPE.

This variety has disappointed me. Its tube is pretty well elevated, and the eye a good yellow; but then the ground-colour is so very deficient in quantity, when compared with the large eye, that it can never stand high in the estimation of a good judge. Its lacing, also, has not been very correct with me; and if it does not bloom finer next season, I shall certainly never recommend any one to add it to his collection.

### CRAIGGY'S SEEDLING, OF 1841.

There is something very distinct about this variety. The tube is beautifully elevated above the eye; the eye itself is a little too small, but a very clean yellow; the ground-colour an exceedingly dark velvetty brown, closely bordering upon black, and the lace very regular, except in the middle of the "segments," where it sometimes does not quite reach the eye. Should it improve in this respect, it will be well worthy of preservation, as its ground-colour is so exceedingly dark that it renders it distinct from all others. Such it has bloomed with me this season, and I shall nurse it with care till I see its face again.

### THOMPSON'S LORD MORPETH.

This is a beautiful variety, a seedling of this year. It took the seedling prize at Felton, at the first exhibition, and was raised by James Thompson, Esq., of Morpeth. It is a noble trusser, the specimen exhibited having ten or eleven pips, all "beautiful exceedingly," as the poet says. The tube is finely elevated, the eye a fine yellow, the ground-colour very dark, and the lace exceedingly correct. It very much resembles Maud's Beauty of England, and ordinary judges would be very apt to confound it with that variety. It is, however, so correct and beautiful, that it cannot fail to be a decided favourite with competing amateurs in future years.

Felton Bridge End, June 10, 1844.

# ARTICLE III.

## REMARKS ON FUCHSIAS.

BY AN ARDENT AMATEUR CULTIVATOR OF FLOWERS.

About thirty years ago a plant of the old and well-known Fuchsia coccinea came into my possession, and then became a pet plant with me, and so continued till the production of some hybrids eclipsed it in colours and size.

The attention given to importing new species, and the intermixture productions raised in this country, have rendered the entire family one of the most interesting of what are termed floral plants.

Two years since I planted out in the open ground fifty kinds. I put them out in a raised border, a foot higher than the walk in front, sloping gradually down to it, the soil being a sandy loam. I had them placed in two rows, the first being plants grown as bushes, and the back row consisted of standards, each about from three to four feet high. Many of these had been formed by grafting fine kinds upon the stocks of older ones, many of which I had possessed for years previously.

They united readily either in tongue or cleft grafting, or in-arched. The border was in the pleasure-ground, had a south aspect, and a fine dense back of common laurel and yew, which formed an admirable shelter. The border contained roses, both dwarfs and dwarf standards, the same height as the Fuchsias. I planted them alternately along; and, when in bloom, they were a most interesting and beautiful sight, and continued to bloom from June to the end of October. At the latter period I took up all the standard Fuchsias, keeping some soil to the roots, and placed them, closely pressed together, in a shallow box, filling up between the balls of roots with good soil, and tying the tops (erect) together. I kept them through the winter under the stage in a dry greenhouse, and when the first effort to push in spring commenced, I replanted them out in their positions in the border. The bush Fuchsias I left in the border through winter, without cutting down the tops; for I had discovered that, if cut off before winter, the hollows of the stems become filled with water in winter: the frost operating, &c., causes the shoots to rot and die, and the plants are generally destroyed through it.

In November I covered to the extent of two feet around each bush, and amongst the shoots, with dry leaves to the depth of eight or ten inches, sprinkling them over, to secure them to the spot, with an inch of soil. This preserved every plant; and, for the last two winters, the F. Baxteri and elegans have retained their entire shoots uninjured, and now (April 25th) are pushing lateral ones to the very tops of the last year's wood. Early in the spring I cut off the dead tops. Nothing in the floral way could exceed the very interesting beauty of the whole, when in full bloom.

I planted a number in various sheltered places of the pleasure-ground, too; several where they were even shaded under trees; and they succeeded admirably, having the necessary attention of watering in extended dry weather. The flowers were more beautiful by being partially shaded from hot sun; and though it has been stated they like full intense sun upon them, I have not found it so; but, on the contrary, they bloom more beautiful when shaded for four or five hours during the middle of the day. This, too, applies to those grown in-doors; especially so with the light-coloured ones, they being apparently more delicate, and are much improved by shading, as stated above.

As Fuchsias can be procured in such numerous varieties of form, size, and colours, very cheap, and being so easy to keep afterwards, and increase by cuttings with the greatest facility, they deserve culture in every situation, whether in or out of doors. A friend of mine has a wire-fence hedge, consisting of Fuchsias, which are neatly trained to it, and cover it entire in summer, which has a most beautiful effect.

## ARTICLE IV.

### ON STRIKING CUTTINGS OF PLANTS.

BY MARY ANNE. DEVONSHIRE.

HAVING several shallow deal boxes, about six inches deep, I sowed in them, early this spring, various tender annual seeds, and placed the boxes upon the back shelf of a small plant-stove.

At the time when I sowed the seeds I had cuttings of several kinds of greenhouse plants I wished to strike, and it struck me that if a portion of fine sand was placed around the side of the box, the cuttings being then inserted firmly therein, they would probably take root. Fearing that, thus experimenting, I might not succeed as I hoped, I divided the lot of cuttings, and inserted the other half in sand in pots, and placed them in the same situation as the boxes. Each were duly attended to afterwards; and the result was, far more of the cuttings struck in the box than in the pot, and a fortnight sooner. The porous nature of the wood, and the warmth it retains, contribute to promote the more certain and early rooting of the cuttings than those inserted in pots.

## ARTICLE V.

### REMARKS ON THE PINK.

BY FLORISTA.

I HAVE read Mr. Ibbett's further remarks in the last number of the CABINET, and I perceive he has not controverted the statement I have before made "that the shape of petal and constancy in lacing of the majority of northern pinks is surpassed, or even approached by southern ones." I again assert that I have not seen any southern flower possessing the form of petal and regularity in lacing which is invariably found in the northern sorts; but on the contrary, the southern flowers generally possess, in an eminent degree, the glaring defect of bad lacing, especially on the guard petals.

I observe Mr. William Harrison, of Felton Bridge End, Northumberland, coincides with my views on this point, and I cannot do better than quote his observations on the subject. They are extracted from an article written by him in answer to an inquirer, E. B., and will be found at page 110 of Vol. ix. of the CABINET, where, after giving a list of flowers, he proceeds to state that " E. B. will find many of the smallest kind, such as 'Westlake's Hero,' and some others, *lace best*, while those with very thick pods, such as 'Imsworth's Omega,' crown better, *yet they lace much more imperfectly*, and are so apt to burst their pods out at one side, that it is near akin to an impossibility, even with all the bandages and care that a competitor can use, to preserve them in a state fit to be presented for competition."

Mr. Ibbett states that he does not consider himself bound to answer any question, except in substantiating his remarks as positive facts; with all due deference to him, I certainly took it for granted that he had asserted a positive fact, when he stated he had supplied Yorkshire, and other northern florists, with southern flowers; and I did not conceive I was stepping out of the way when I made the inquiry as to the whereabouts his customers resided, or if any floricultural honours had been awarded to them for their southern flowers. However, he has admitted the name of *one* of his northern friends, (the Mr. Harrison above alluded to,) and also favoured us with an extract from his correspondence; yet no mention is made of the prizes obtained by those flowers at the Felton show. I am, however, free to confess, that my questions, taken abstractedly, do appear impertinent; but coupled with Mr. Ibbett's assertion, that there was no difference of opinion between the northern and southern cultivators in the criteria of the pink, and the fact of his having supplied plants to northern growers, was certainly strong grounds for expecting a straightforward and satisfactory explanation. However, as he still insists there is not any variation of opinion existing, and favours us with extracts from the correspondence with Mr. Harrison, to bear out his remarks, I trust I may be pardoned if I adopt the same course.

Shortly after the remarks by Mr. Ibbett appeared in the March number of the CABINET, I requested Mr. William Bradshaw, florist, Sheffield, to favour me with his opinion upon my first paper in the previous December number, when he wrote to me as follows:—" I have read over your article on the pink in the CABINET for December last, more than once; for, if a subject is worth reading at all, it is worth reading twice. My opinion upon it is this, it was written with a view of bringing round a better understanding betwixt the northern and southern pink growers of what the standard of the pink should be, to obtain perfection; *there being a greater disparity in the ideas of each other on this flower than on any other in cultivation.*

" Now Mr. Ibbett denies this, and says florists are of one opinion; you may therefore inquire whether he knew a south-raised pink to win a prize at any of the following places in Yorkshire, namely, Sheffield, Leeds, Bradford, Halifax, Wakefield, and Huddersfield; a locality where the very essence of pink growing is carried on. I have had many south country pinks, but they have always turned out exactly as you describe them—a mass of confused petals, void of either shape or regularity in any respect." I omit the conclusion of my friend's epistle, because he is rather severe on Mr. Ibbett for his attack on the Lancashire florists.

In another communication which I received from a Staffordshire florist, whose opinion I also requested, he states, " I can with confidence assert that the article in the December number of the CABINET, signed 'Florista,' expresses the opinion and taste of the florists here. We have long since ceased to notice anything said or written by a southern florist about the pink, *as their notions and our's are so at variance.*

" You should inquire whether those parties were florists to whom Mr. Ibbett supplied pinks in Yorkshire, Felton, &c., and if so, how it was, none of the south country flowers won a prize at any of the northern exhibitions; for according to the 'Florist's Register' for the last several years, the Lancashire pinks were generally victorious.

" I would observe, that the article you have written in the CABINET, is quite in unison with the ideas of the greatest number of florists it has been my lot to meet with; and in conclusion, I beg to say, if Mr. Ibbett has ever sold pinks to any dealer in Lancashire, it has been to one who wanted to supply some gentleman's garden with some *to make nosegays of.*"

In addition to the preceding extracts, I am further corroborated in my assertion, that a difference in opinion does exist between the cultivators of the pink, by the remarks of Mr. Dent, and those of Mr. Conolly, inserted in the last number of the CABINET; besides which, Mr. Ibbett has unwillingly acknowledged the fact in his very ungenerous, I may say unjust, observations on Mr. Dent's article, in which, " at one fell swoop," he condemns a host of cultivators without considering the fact of the different criteria of perfection entertained by each grower.

It is admitted that the Lancashire florists have their standard of perfection for this particular flower, but the same may appear insignificant in the estimation of Mr. Ibbett, when opposed to the metropolitan one; and such observations he has hazarded does not redound much to his credit as a florist.

I beg to mention that I had some conversation last season with a southern commercial florist, who regularly attends the metropolitan exhibitions, and who had been a tour through the northern provinces for the purpose of inspecting their flowers; and when alluding to the properties of the pink, he candidly admitted there was abundance of room for improvement in the southern varieties, and observed that the majority of the pinks cultivated in the neighbourhood of the metropolis were very defective in their lacing.

FLORISTA.

A Midland County, 12th June, 1844.

# ARTICLE VI.

## REMARKS ON GROWING PLANTS IN GLASS CASES,

BY CALEDONICUS.

(*Continued from page* 137.)

THE degree of humidity which is thus maintained is not, however, suited to all plants. Those which partake largely of a cellular structure, and possess a succulent character, and especially those which have fleshy leaves, bear best the atmosphere generally existing in these cases; whilst, on the contrary, its continued humidity is unfavourable, says Mr. Ward, to the development of the flowers of most exogenous plants, except such as naturally grow in moist and shady situations. If, indeed, we call to mind the vast quantity of moisture which many plants naturally exhale in the free atmosphere, and the check which their vegetation receives if the atmosphere continue for some time both humid and still, we cannot wonder that to such plants the moist air of these cases should be unsuited, and that many of them, placed in such circumstances, should, as it is said, "damp off." But others of a different character, whether growing in the soil, or suspended from the roof, find always sufficient moisture to support a healthy vegetation. Hence the supply of water given to the soil in the first instance, being secured from waste, is successively absorbed, exhaled, and condensed within the case itself, and made to sustain over and over again the vegetation of the same plants, without suffering either the soil or the atmosphere to become, at any time, too dry to carry on that process.

### *Condition of Plants, in regard to Heat, in close Cases and in the free Atmosphere.*

The condition next to be noticed is that which relates to temperature. In the list of plants growing together in these cases are some which are natives of the tropics, others which have been brought from high latitudes, and others the growth of our own temperate clime. Now the varying effects of climate are well known so far to modify the characters and habits of plants, as to bestow on each region its peculiar and appropriate vegetation. Even in the same latitudes climate is so changed by elevation above the sea, as to blend the vegetation of the tropical with that of the arctic regions; the same mountain which enjoys a tropical climate at its base being found clothed, at different elevations above the sea, with the vegetation of every other clime; the plants finding, in the different altitudes at which they grow, a climate that compensates, more or less completely, for the difference of latitude. It is a great merit in the plan of Mr. Ward, that it breaks down, in a great measure, these distinctions of climate, and the peculiarities to which they give rise; and enables us not only to grow together, in the same soil and climate, plants which naturally inhabited countries the most distant from each other, and flourished only in the most opposite climes, but to pass them from one extreme of climate to another, through all the intermediate gradations, with very little trouble, and without exposing them to any great risk. Thus, in the month of June, 1833, Mr. Ward filled two cases with ferns, mosses, and grasses, and sent them out to Sydney, where they arrived in January, 1834. They were there taken out in good condition, and the cases refilled with plants of that country in the following month, the thermometer, at the time, ranging between 90° and 100° Fahr. In the passage to England the temperature varied greatly, falling to 20° in rounding Cape Horn, and rising to 120° in crossing the Line. On arriving in the British Channel in November the temperature was again down to 40°. During the whole voyage of eight months the plants in these cases received no protection either by day or by night; neither were they once watered through the whole period, and yet were taken out at London in the most healthy and vigorous condition. Other cases, filled with plants of a higher order, have been sent to Alexandria, and thence forwarded to Cairo, where, after a two months' voyage, they have been taken out of the cases in a perfectly fresh and vigorous state. Exchanges of plants have been made, by means of these cases, between the professor of botany in this university and botanists in the island of Cuba; and the great establishment of the Messrs. Loddiges, at Hackney, is said to have sent out or received not fewer than 200 cases filled with plants, and generally with complete success.

In the opinion of Mr. Ward, it is owing to the "quiet state of the atmosphere surrounding the plants enclosed in these cases that they are enabled to bear the extremes of heat and cold to which they are exposed in these long voyages." In proof of the former position he refers to the well-known experiments of Fordyce and Blagden, who were able to remain, for a short time, in a close room raised to the temperature of 212°, or even 260°, Fahr.; and in support of the latter he appeals to the experience of Mr. King, who accompanied Captain Back in his late expedition to the arctic regions. That officer states that a difference of 70° or 80°, either from cold to heat, or from heat to cold, did not suspend his usual avocations in the open atmosphere when the air was perfectly still; but, though the temperature might be 40° higher, if it was accompanied with a stiff breeze, he did not stir from home. In like manner Sir Edward Parry found that a degree of cold sufficient to freeze mercury could be more easily borne when the air was perfectly calm, than when, with a stiff breeze, the temperature was 50° higher. "When the cold was 40½° below freezing on the Fahr. scale," says Mr. Laing, in his late "Tour in Sweden," "it was quite practicable to prosecute the great cod-fishing in open boats in the Lafoden Isles within the arctic circle. The calmness of the air which accompanies this extreme cold is a kind of natural safeguard against its severity, the abstraction of heat from our bodies being then much less rapid. Such a hard winter," he adds, "is considered here a blessing next to a good crop; for the fisherman then gets out to sea, the landsman gets in his timber out of the depths of the forest, and the inhabitants of the most pathless districts obtain their supplies of grain, potatoes, &c., at little cost of transport."—(*Tour in Sweden*, p. 364.)

The powerful and rapid operation of wind in lowering temperature was shown in an experiment of Dr. Heberden, recorded in the "Philosophical Transactions" for 1826. He suspended a thermometer, previously raised to 100° Fahr., in an atmosphere at 31°, when a strong breeze prevailed, and in about half a minute the mercury fell not less than 48°; whilst in an atmosphere at 30°, but without any perceptible wind, the fall of the mercury, previously raised, as before, to 100°, was only 19° in the same period of time. These facts, which doubtless apply to vegetable as well as to other bodies, due regard being had to differences in their conducting powers, show that degrees of cold may be borne with impunity in an atmosphere that is perfectly still, which, if accompanied with a brisk wind, would be quite intolerable. That such stillness prevails in the plant cases there can be little reason to doubt; for though considerable motion may often occur in the air within them from variations in the external heat, yet, as little or none of this air escapes, its temperature, at any given period, must be deemed pretty uniform, and cannot be rapidly reduced as it is by the frequent contiacts and changes of surface which go on in the free motions of an agitated atmosphere. In an atmosphere, too, which is so still, and in which changes of temperature proceed so slowly, tropical plants may, perhaps, bear, without injury, degrees of cold which would prove fatal if occasioned by the frigorific operation of free air in constant and rapid motion.

### *Condition of Plants, with regard to Light, in close Cases and in the free Atmosphere.*

Of the great importance of light to vegetation Mr. Ward is fully sensible. " The success of his plan," he says, " will be in proportion to the admission of light to all parts of the growing plants. In every place," he adds, " where there is light, even in the centre of the most crowded and smoky cities, plants of almost every family may be grown " by this method. Seeds, it is well known, germinate best when buried in the soil, and entirely secluded from light; but when the young germ pushes into day, if light be still excluded, by inverting over it an opaque vessel, the plant shoots up into a long and feeble stem, is of a pale or whitish-yellow colour, and possesses little odour or savour. On the contrary, if the vessel be transparent, so as to transmit light, the growth is more vigorous, the young plant puts forth buds from its stem, and soon exhibits its characteristic form and colour.

These differences in form and colour, according as plants are grown in light or in darkness, were early noticed by Ray, and afterwards by M. Bonnet, in his " Recherches sur l'Usage des Feuilles," p. 210. In the year 1771 Dr. Irvine described still more minutely the influence which light exerts on vegetation. " Plants," says he, " though furnished with water, heat, and air, grow imperfectly, if placed in a dark box, and never contain anything but a watery juice;

hence the rays of light are in some way necessary to the perfect growth of vegetables; since, when deprived of this influence, they all agree in the nature and qualities of the juices they contain; nor have they that variety in colour and flavour which they had before. The most pungent vegetables become insipid, the highest-scented inodorous, and the most variegated in colour of a uniform whiteness, when secluded from light. Vegetables, too, which grow in a natural situation, readily burn when dry; but a vegetable reared in a dark box contains nothing inflammable."—(*Essays on Chemical Subjects*, p. 430.) In regard to colour and smell, similar observations were made by Professor Robison on tansy (Tanacètum vulgàre) and other plants, which, when grown in darkness, were white, and afforded no aromatic smell; but, when brought into daylight, the white foliage died down, and the stocks then produced the proper plants in their usual dress, and having all their distinguishing smells.—(*Black's Chemical Lectures, by Robison*, vol. i. p. 532.)

[*To be continued.*]

## ARTICLE VII.

### ON BLOOMING DAHLIAS FOR SHOW.

BY MR. J. HALL, JUN., SHEFFIELD.

Of all the flowers that decorate our borders, or attract admiration and notice at the Floral exhibition, there is no flower that, in my opinion, has so great a claim to the favour and attention of florists as the Dahlia; and for this reason, there is no flower which has returned such speedy and ample recompense for every trouble and effort that has been bestowed upon its cultivation; for although but a comparatively short number of years have elapsed since its first introduction into Europe by Humboldt from the sandy plains of Mexico, where it grew an insignificant single flower; and a much shorter number still since it was first taken in hand as a florist flower, and cultivated with an aim to improvement; yet we now find it suddenly burst forth as one of the principal plants of the age, and attained to a degree of perfection scarcely equalled by any other flower.

*Chacun à son goût*, is the French adage, and of course every man has his own peculiar tastes as to the different merits and beauties of flowers; on this ground then I shall perhaps be excused for my enthusiastic partiality to the Dahlia. Oh! there is something about the Dahlia which in my eyes can be found in no other race of plants; a richness, a diversity, a brilliancy, and nobleness of form altogether unparalleled by any other of Flora's lovely offspring. It is a flower that is not only magnificent and dazzling as a border ornament, but it is one also that will bear the most strict scrutiny and examination; take up a perfect specimen, look at it, examine it! mark the beauty and regularity of its arrangement, petal over petal, tier over tier, all moulded and dispersed with the most perfect order and exactitude; look at its symmetry, its depth, roundness, and circularity; behold the exquisite shades and tints of its colouring! it is not only the mere perfection of some half dozen or half score petals which constitute many of our florists' flowers, but it is the perfection of hundreds, all modelled and pencilled with the nicest equality and similitude; and when we look upon and admire these beautiful productions of nature and art combined, we cannot refrain from breaking out in the oft-quoted and ever beautiful lines of Thomson:—

> "Who can paint
> Like nature? can imagination boast,
> Amidst his gay creation, hues like hers?
> And can he mix them with that matchless skill
> And lay them on so delicately fine
> And lose them in each other, as appears
> In every bud that blows? If fancy then,
> Unequal, fails beneath the pleasing task,
> Ah! what can language do?

But I must cut short my enthusiasm, and return at once to the original design with which I set out, *i. e.* just to offer a few plain and practical directions for producing blooms in their most perfect attainable state. I do not know that I am going to bring forward anything new on this subject, or different from what is practised by perhaps nine florists out of every ten; but there is always a certain class of amateurs springing up, and what, in garden phraseology, are technically called "Young Beginners," who, though they may be growing all the best varieties in cultivation, and treating them (as they think) with every kindness, yet, when they go to the floral exhibitions and see the complete superiority of the flowers there exhibited over their own, often return altogether discouraged and dissatisfied with their own comparatively meagre productions. It is for this class that I intend the following remarks, which, if acted upon, will, I have no doubt, enable them to produce flowers as large and as perfect as any of those exhibited by old and experienced growers.

In the first place, Dahlias, when first planted, should never be placed in soil that is too rich, or that has been newly manured; for if so, though they will flourish and grow very luxuriantly, yet it is a well-known fact that all blooms produced by such plants are never so fine and perfect as those grown on stiff, strong plants, less luxuriant in habit. The plan I generally adopt, is to dig and trench the ground well in winter; then manure and set it with early potatoes, and afterwards plant the Dahlias among the potatoes (making a slight hollow for the water to lodge) and in about every other row, so as to leave the Dahlias four or five feet apart, nearer than which they should never at any time be planted. By this means the ground not only gets well prepared and replenished at the proper season, but an extra crop is secured, which, while it considerably detracts from the expense of Dahlia growing, does not, however, in the least interfere with or injure them. If the soil be poor and exhausted, I sometimes dig out a hole and fill it with fresh loam or vegetable mould. As soon as the plants are set, water should be given them (if the weather be dry), till they have taken fast hold of the ground, after which no more should be applied until the blooming season, when they should be copiously watered every time they appear to require it. Many people think that by continued watering the plants are sure to flourish; so they will, and be drawn up long weakly things that will never produce a good bloom; many thus fall into the very common error of "killing with kindness." It is a very prevalent practice also with inexperienced amateurs to cut and prune their plants till they are mere skeletons, thinking that by this means all the strength and power of the plant will be concentrated in what is left; but this is very erroneous, as it is well known, or ought to be, that plants, something like animals, derive support from all their different parts and members, and that the unnecessary amputation of these parts weakens and deteriorates the whole plants. There are, however, some plants which require a little pruning, such as have branches, for instance, that crowd and are in each others way,—these ought to be carefully taken off, and no more, but as soon as the plants begin to show buds I would then begin to thin them a little, say, for instance, two out of every three; this, while it will not injure the plant, will have the desired effect of making those flowers that are left finer and better than they would otherwise have been. A slight top dressing of old cow manure should also be given them at this period, as it is then that the plants require aid and support.

As soon as the flowers begin to open, they at once become the prey of numerous species of vermin, which, if not carefully attended to, will utterly destroy all the blooms as they expand; the most formidable of these is the earwig, which, if suffered to remain, will devour more or less of every petal in the flower. The best recipe that I can give for this is one that I once heard tell of as being discovered by a man who made a great noise about it, and spread it far and wide through the land as an infallible remedy (which it really was); the recipe was sent out at a high premium in sealed envelopes, enclosed in a great many papers, and was this, "Catch them and kill them." This is, in fact, the only mode that I am aware of, at all efficacious for the destruction of this insect; it is best performed by having small pots on the stakes with moss inside, and going round morning and evening to examine them; the stakes also should be examined, for if there be any hole, crevice, or hollow under the bark, they are sure to take refuge there. These pests should always be looked after as soon as possible, for one killed in the early part of the season is worth a score killed later on. Another troublesome foe is the slug and caterpillar, which should be conquered in the same way; but probably the most difficult of all to get rid of is a little insect called the thrip, which, when it once gets upon a flower, seems at once to extract all its colour and vitality, and the blooms rapidly languish and die beneath it. The best remedy I have yet found for them is tobacco water, which, if frequently applied, will considerably check, if it does not altogether destroy them.

But one of the grand secrets in producing the large, round, highly crowned flowers we see at shows, is in the art of shading and covering; there are some people, I know, that object to this system, saying that it is unnatural, artificial, and so on; but I say if a flower can be made more beautiful, and more perfect by artificial methods, it is right and proper to do so. There are various plans of effecting this purpose, the most common of which is, simply to shade them from the solar ray with a box or plain board; this is quite sufficient with the self-coloured varieties, but with the more delicate and edged ones, another process, called covering, is essential. This is done by first driving a stake by the flower intended to shade; then taking a flat piece of board, about a foot square, with a slit sawn half way across, just wide enough for the stalk of the flower to pass, and fastening it by some contrivance to the stake just at the height where the flower is; then drawing the stake through the slit, and letting the bud be just elevated so much above the board as to prevent the opening leaves from touching it; then covering it with a flower-pot, and allowing it to remain till fully blown. The slit also should be well packed with wool or cotton to hold the flower in its place, and keep out the insects. The sun, acting upon the earthenware, will have the tendency to bloom it faster in this way than otherwise, but if the flower is wanted to be kept, a damp cloth should be thrown over it, and air given underneath.

There are various other methods of shading Dahlias, but as these are the most general and effectual, I shall not attempt to enlarge on them at present, feeling satisfied that the plan I have laid down will, if adopted, at all times enable the "Young Beginner" to compete successfully with his elders at the Floral Exhibition.

## ARTICLE VIII.

### REMARKS ON BUDDING AND GRAFTING THE RHODODENDRON, ROSE, &c.

BY CLERICUS.

Observing in a late number of the Cabinet some remarks on increasing the Rhododendron and similar shrubs, as well as Roses, &c., and now being the season for operation, has led me to forward the following observations on the process of budding and grafting.

The success of budding depends greatly on the state of the stock; if this is growing vigorously, and the bark flies up quite freely on the introduction of the budding knife, the budding will hardly fail of success; if the young shoots of the stock are nearly ripened to the top, the bark is in the way of beginning to fasten to the wood; or if the shoots are small and weak, and the plant unhealthy, the bark most likely has not risen at all; in either case, the bark will not rise freely from the incision with the handle of the knife, the sap is not circulating freely, and it is in vain to attempt introducing a bud by forcing up the bark. The bud should be chosen from a vigorous young plant; the shoots from old trees have not so much sap or vitality; and the bud should be chosen when the bark is beginning to assume a ripe colour; if too ripe, it does not rise so freely from the bark, and vitality is beginning to get dormant; if too green it is apt to perish before uniting to the stock. The buds should be tied as soon as possible after the operation, to exclude air from the wounds; but if the stocks are vigorous, drawing very tight is not of so much consequence here as in grafting. When buds are nearly ripe, in which state they succeed best, the piece of wood which unites the bud to the branch is apt to break off far in, and leave the appearance of a hollow eye. Some operators attach great importance to this, and say that, though the bark live and unite, the bud will not push in the spring; but I have frequently inserted buds with very hollow eyes, and marked them for the purpose of experiment, and they always pushed as well as the others; the sap of the tree should soon fill this hollow. Much of the success also depends on having the edges of all the cuts smooth, and the operation done as speedily as possible; if the edges of the wound are rough, the vessels of the liber, where the living principle is most active, are bruised and lacerated; and, if long exposed to the air, they begin to spoil. The common method of extracting buds is to cut away a piece of the shoot, and afterwards extract the wood; but this destroys the very sharp edge of the knife, and the cut will invariably be found more or less rough. The bark should be cut all round the bud to the shape and size wanted, and the thumb pressed against the cut portion, at the side of the bud; if the shoot is growing and healthy, the bud will separate freely, and there will be no laceration of the edge; the bark will be cut as smooth as a piece of cheese, and the edge of the knife will be kept sharp, as no wood needs to be cut through. As far as mechanical operation is concerned, this cutting smooth is of far more importance than any method of inserting the bud; if the bud does not squeeze freely off the branch with the side of the thumb, it is very doubtful of succeeding.

Much of the success of grafting depends on keeping the alburnum, or newest layers of wood and liber, or inner bark of the stock and graft, closely united and pressed together, till a complete union takes place; it is in the bark and soft wood that the development is most rapid, though all the cellular tissue is capable of uniting. For this purpose they should be as near of a size as possible, and the slice from each should be very small, allowing as much of the alburnum as possible to remain on both; it is there where the sap rises; and if the slice is made, either in graft or stock, through to the heart-wood, the ascent of the sap is stopped, except by the edges. The graft should not be put on till the stock has commenced to grow, when the new layer of inner bark is about to be formed, and the efforts to unite commence; both stock and graft are apt to dry and shrink, or cling, and thus part from one another, if done long before the commencement of growth. The grafts should be taken off before they begin to spring, and their ends inserted in damp earth; as they will cling more if taken off after they have begun to swell by growth, and thus part more from the stock. Also, if the living principle is set in motion by the commencement of growth before taking off, and then checked by taking off, or by cold weather succeeding warm, the graft will perish more readily than if the growth of the stock had commenced first, and the graft been fed from the union of the tree; for this purpose, the grafts of deciduous plants should be taken off before they begin to swell in the bud; as, if growth has commenced, it will proceed further in the graft, though off the plant, and be hurtful. Neither seeds nor cuttings will perish near so readily when in a dormant state, as when life is set in motion, and then checked. To prevent clinging or shrinking, choose well-ripened wood. The young shoots of young trees, or the bottom growths of old trees, are generally more vigorous than the extremities of old trees, vitality is most active in these young shoots; but in grafts that have the young wood soft and apt to cling, choose strong, vigorous, two or three years old wood. Many grafts that succeed with difficulty, if the grafts are retarded, the old wood chosen, and the stock allowed to spring before grafting, will succeed in this way when they will do so in no other. Much of the success, however, depends on the warmth of the weather keeping the sap flowing. Moist warm weather is good, but heat is the principal requisite, the stocks being already established; and wet weather is very often cold in spring. The mechanical part of the operation depends on the slopes of the cuts being made to fit one another exactly, which is easiest done by choosing the slopes of the graft to fit those of the stock as nearly as possible, by thin slices being taken off each; by using a thin-backed, broad-bladed, sharp knife; and by drawing the hand straight without twisting when making the cut. The graft and stock must be hard pressed together, without shifting, in the tying; which is best done by a smart hitch or pull, every time the wet bast ligature passes the graft in the act of tying, and not by continued pulling. The above remarks apply chiefly to whip grafting, which is the most common. Crown-grafting is that most practised for old trees; and the necessity to take off the grafts, and allow the stock to push, is here absolute, as the operation cannot be performed properly till the bark rises freely from the stock. When the bark rises freely, success is very certain in this way, if the grafts are strong and not sprung; as the flow of sap causes union to take place speedily, and the strong bark keeps the graft in its place. If the bark and wood of the stock do not separate freely, it is in vain to attempt grafting in this way. Grafting soft evergreens, as Rhododendrons, Daphnes, &c., is best done by waiting till growth has fairly commenced, either the first, pushing in spring, or the second, in summer, and inserting the graft in the manner of a bud, by opening the bark of the stock. The grafts of these must not be taken off till needed, as they are not dormant like deciduous grafts, and more apt to perish. The bark will not rise till growth has fairly commenced, and dull, cloudy, moist, warm weather suits best, if dry and sunny, they should be shaded. With evergreens a few leaves are left on the top of the stock to draw up the sap, and to carry on the growth; it is useful in the grafting of all soft evergreens.

Increase by layers is often adopted with Evergreens, and is generally successful where circumstances admit of it. Take care to tongue the layer close under a side bud, and keep the tongue quite open, and the part above the tongue to be made as perpendicular as possible, the two being at right angles, which causes the sap to accumulate, and so form a swelling of cellular matter at the bottom of the tongue, from which the roots proceed. A little fine sand put round the cut prevents the wound corroding in heavy soils, and by pressing on the bark, as in cuttings, promotes the rooting. The layer must be kept steady by a peg, but where the shoot is long and likely to be shaken by wind, &c., that must have a support to be tied to.

# ARTICLE IX.

## REMARKS ON THE ORIGIN OF DOUBLE FLOWERS.

BY MR. WILLIAM TEMPLE, OF MOUNT PLEASANT, LIVERPOOL.

CONVERSING with a friend a few days back on the most certain way to obtain the greatest quantity of double Stocks from seed, we were led to speak of the origin of double flowers in general, and that generally speaking the cause was little understood. The result of our conversation induced my friend to transmit me the following remarks upon the subject, which, after reading, I forward for insertion in the CABINET, thinking, when the cause is generally understood, attention will be additionally given to it in a practical manner.

A highly concentrated state of the sap in plants induces the production of flowers, and before the petals, pistil, and stamens can be formed, it must be perfectly elaborated ; thus perfected, they have a higher state of existence than the leaves, which is the lowest, stem petals, after which the pistil and stamens, and finally the fruits. This perfect elaboration can only be obtained by a due degree of light and height, &c.

When, however, double flowers are produced, it is generally by a change of the higher parts of the existence, of stamens and pistils into the lower state of petals; and the more the plant is checked by a poorer soil, and a sparing supply of water for a period, the more likely, by giving luxuriant food and treatment afterwards, to bring back the pistil and stamens to a grosser and lower stage of existence to petals, and thus produce double flowers. The greater the check given, the more powerful will be the effect of after luxuriance when shifted into a rich soil, placed in due heat, properly supplied with water and every requisite attention, with the greater vigour there will be a flow of crude sap, and the flower is not only then produced larger, but the crude sap has a tendency to lower the state of existence, and the stamens and pistils being higher in the scale of existence, are reduced to the more inferior condition of petals. Sometimes the scale of existence is so far reduced, that what had been originally the nucleus of a branch, but elevated by elaboration acting on the vital energy into the state of petals, stamens, and pistils, is not only reduced to petals and become double, but will shoot again into a branch, as we have had instances with Brown's Superbe, and other petals, and the pistil into green leaves, and the quantity of each greatly increased. In the Rhododendron the flowers are produced from the terminal bud of the shoot; if the summer and autumn have been warm, the bud swells larger, and we have a branch of flowers instead of a branch of leaves the ensuing spring; but it is always difficult to say, till the bud is evolved, whether we shall have leaves or flowers. In raising double or full flowers from seed, therefore, we should carefully guide our attempts by experience; in procuring the seed, we must get it from the *most double flowers we can*, as the progeny always bears more or less resemblance to the parent. In the Dahlia the flower is not, strictly speaking, full; it belongs to the compound class, in which a great number of florets are arranged on one common receptacle; in single dahlias, and other flowers of this class, the ray or outer row of florets has the petals fully evolved and coloured; in the florets of the centre or disk, the petal is only in the state of a small tube, inside of which the stamens are situated. Rich cultivation forces these tubes to assume the state of coloured petals; sometimes tubular, as in the quilled dahlias, and sometimes flosculose or flattened, as in others; sometimes the stamens are changed into petals, sometimes they are abortive, but generally both these and the pistillum are unchanged, and hence there is little difficulty in getting seed from dahlias. Plants that are full of double flowers at one time, when the plant is vigorous, will change and come more single when checked by bad weather, or when the plant begins to ripen and get woody. To return to the raising of seedling double flowers. Roses, Pinks, Carnations, and Ranunculus change the stamens only into petals, and sometimes these are only partially so in very full flowers, and seed is comparatively easy to be obtained from them; we should, as before observed, select from the fullest and best flowers. In the Anemone the pistils are changed into petals, the stamens unchanged; seed of these can therefore only be obtained from flowers not perfectly full, or by impregnating flowers nearly single, with a tendency only to fulness, with the anthers of full flowers. In Stocks and Wallflowers both stamens and pistil are changed into petals; seed cannot, therefore, be had from full flowers in these sorts, and the only resource we have is to save seed from those in which a tendency to fulness has commenced, by having a deficiency of nourishment, whether of water or manure, and afterwards excited to luxuriance by a plentiful supply; and the greater the change, the greater the likelihood of success. Old seed, or seed dried, gives a check; we have had instances of old neglected seed, which had been reckoned very inferior when the seeds were fresh and new, come almost every plant double, when a little had been left over and sold when old. The seed for raising double flowers of any sort can *hardly be too old*, if it will grow at all; and the weak plants, first stunted and then luxuriated, will be found most successful; the seed should be sown on heat, and the weak plants *most cared* for. After flowers have once been produced double or full, the habit of coming double will be retained, if kept so by rich cultivation. When any variety has begun to sport, the plants should be raised off those individuals which have not yet sported, as the sporting habit might become fixed; and this should be carefully guarded against, by propagating from those roots that show the fullest flowers. The double China Asters, Feverfew, Rockets, Daisies, &c., come double in the same way as Dahlias. The double Snapdragon is similar to the Stock. Campanula, Cistus, the Thorn, and most other double flowers, are similar to the Rose. Thus, by attention, have many of our English plants been induced to produce double flowers, and so, no doubt, would be the result with others, both domestic and foreign, if attention was duly paid to the subject.

## ARTICLE X.

### ON THE PRACTICE OF THE POT-CULTURE OF PANSIES.

BY THE SECRETARY OF THE BOXLEY HEARTSEASE FLORAL SOCIETY.

In advocating the practice of growing, blooming, and showing Pansies in pots, I by no means deny the propriety of common culture in the open ground, and showing cut flowers, but do insist upon the propriety of both methods, as they are equally important. The latter may insure more vigorous plants and a greater profusion of blooms, with little care; but I have seen equally fine and more perfect blooms when grown in pots, receiving protection, &c. All Pansy growers have not equal means at command; arrangements should therefore be made for showing, so as to give all an equal opportunity of com-

And I now give a brief summary of the very successful result of my own experience in pot-culture, and which I strongly recommend to others.

Commence with small plants, having short stout stems and small pots. They require the same rich kind of soil or compost for pot-culture as they do in the open ground, but more frequent watering (excepting their inactive state in the winter season, when they will need but a very moderate supply) which should be with liquid manure, or foul soap-suds, to be carefully poured into the pot without sprinkling any upon the foliage, and shifting into larger pots as the plants advance in size; also frequent top-dressing with leaf-mould, well rotted dung, or the ashes of burnt weeds, vegetables, or wood. They must be entirely defended from the powerful rays of the sun. They require the natural free air, dews, and rains, until the buds are nearly their full size and begin to expand, at which time the blooms should be defended from wet and winds. At all times they require a free drainage at the bottom of the pot.

The above is written at the request of a Pansy grower, who being so pleased with the results of my practice, desired me to give him my mode of treatment in pot-culture, as he intends to commence.

# PART II.

## LIST OF NEW AND RARE PLANTS.

Antirrhinum majus flora pleno. Double blood-coloured Sna
There have been double Snap-dragons in our gardens for some years, viz., rose-coloured and white, but this is the first blood-coloured that we have seen; it was raised by Mr. Young, Nurseryman, of Epsom, in Surrey. All the tribe are well deserving a place in the flower garden, and the one now figured, especially so.

Barkeria spectabilis. Showy Barkeria. Orchideæ. Gynandria Monandria. (Bot. Mag. 4094.) Its native country is Guatemala; it has recently bloomed in the collection of Mrs. Wray, of Cheltenham. The flowers are produced in long terminal peduncles of eight or ten in each. The flowers are about four inches across. Sepals and petals of a beautiful rosy-lilac. Lip-lilac, spotted with dark chocolate, and having a yellowish centre. Baskets filled with moss, or blocks of wood, are found to be most congenial to the roots of Barkerias; in peat, they quickly perish.

Cattleya intermedia variegata. Intermediate variegated lipped. (Bot. Mag. 4085.) From Brazil; the sepals and petals of a lilac-purple, lip white, and a yellowish centre, lamellæ red. A very pretty variety.

Cereus Pitajaya. Variable. (Bot. Mag. 4084.) In the collection at the Royal Gardens of Kew. It is an erect growing species. The flowers are large somewhat of the size of C. grandiflorus, the night-blooming; white, with tinge of sulphur.

**Cereus crenatus.** Crenated Torch Thistle. (Bot. Reg. 31.) Cactaceæ. Icosandria Polygynia. It belongs to the winged section, as the speciosus, speciosissimus, &c. The flowers are about five inches across, of a pale cream colour. The plant was sent to G. N. Skinner, Esq., frcm Honduras, to Sir Charles Lemon, Bart., M. P., and it has bloomed in the collection at Carclew. It was exhibited at the show held in the London Horticultural Society's Garden, at Chiswick, in May last, and much admired.

**Ceropegia oculata.** Ocellated. (Bot. Mag. 4093.) Asclepiadeæ. Pentandria Monogynia. Sent by Miss Jones, from Bombay, to the Royal Gardens at Kew, where in the stove it has bloomed. It is a climber, producing its flowers in umbels of five or six in each. The corolla is two inches long, tube pale yellow-green, the upper portion deeply eye-like spotted. Corona double orange-yellow.

**Disa cornuta.** Horned flowered. (Bot. Mag. 4091.) Orchideæ. Gynandria Monandria. (Synonym Orchis cornuta ) From the Cape of Good Hope, in 1813, to the Royal Gardens of Kew, where in a cool stove it has bloomed. The flower stem rises about a foot high, and the spike of flowers is about half the length. The blossoms are of a beautiful mixture of green, white, and purple. Each blossom is about an inch across. It is a very interesting and pretty flowering plant, well deserving cultivation.

**Epidendrum pterocarpum.** Wing-fruited. (Bot. Reg. 34.) Orchidaceæ. Gynandria Monandria. A native of Mexico. The flowers are produced in a short spike of six or eight in each. A separate blossom is about an inch across. Sepals and petals reddish-brown; the labellum yellow, with the lip of a cream colour.

**Lælia superbiens.** Gorgeous. (Bot. Mag. 4090.) Orchideæ. Gynandria Monandria. Discovered by Mr. Skinner in Guatemala, who states that he first discovered it in the village of Surupango, planted by the Indians in front of their doors. It exists in immense quantities in its native habitations growing out of the crevices of rocks, and sheltered from north winds. Some of the plants Mr. Skinner there discovered had bulbs of the height of twenty-two inches, with flower stems four yards long, bearing upwards of twenty blossoms. Each flower is about five inches across. Sepals and petals of a pretty lilac-purple colour. Labellum, rich yellow-streaked with deep purple, and having a broad margin of crimson-purple. It is a splendid blooming-plant, well deserving a place in every collection.

**Lonicera diversifolia.** Various-leaved Fly Honeysuckle. (Bot. Reg. 33.) Caprifoliaceæ. Pentandria Monogynia. A hardy middle sized shrub, from the mountains of the north of India. It blooms in May and June. The flowers are of a bright yellow colour. There is another new species from India in the Garden of the London Horticultural Society, having yellow flowers stained with purple.

**Leucocoryne alliaceæ.** Garlic-scented. (Pax. Mag. Bot.) A pretty flowering bulbous perennial greenhouse plant, blooming profusely in the early spring months. It has been grown very successfully too in the open border. Each blossom has a narrow tube about three inches long, and a deeply divided limb, an inch and a half across, blue, with a paler centre.

**Morina longifolia.** Long-leaved. (Bot. Mag. 4092.) Dipsaceæ. Diandria Monogynia. A native of Northern-India, from the Himalayas, &c. A hardy herbaceous plant. The flowers are produced in involucres, in long spikes, each blossom is about three quarters of an inch across of deep rose colour. A very interesting flowering plant, well deserving cultivation.

**Gompholobium Hendersoni.** (Pax. Mag. Bot.) Leguminosæ. Decandria Monogynia. Seeds of this very pretty species were sent from the Swan River colony, by Captain Mangles, R. N., and the plant has bloomed in the collection of Messrs. Henderson's, Pine Apple Nursery. This species has not, like G. polymorphum, long slender shoots, but is a small dwarf bush, of a stiff rigid habit. The flowers are a trifle less, but are produced in profusion, of a rich orange-red, with a yellow eye. It well deserves a place in every greenhouse.

# PART III.

# MISCELLANEOUS INTELLIGENCE.

## QUERIES.

ROSE TREES INFECTED WITH GREEN FLY.—My standard, as well as some of my dwarf Roses, are again pestered to an amazing extent with the Green-fly. What is best and easiest mode of destroying them without doing so to the rose-buds and foliage. An immediate answer will oblige AMICUS.

[A strong infusion of camomile has proved effectual, having some in a vessel into which the shoots are bent and held for a moment. So with tobacco-water. Snuff, in a finely-powdered state dusted over has, too, proved successful, or smothered with smoke. We have seen a puddle of earth and water to the consistence of cream taken in a pail, and the ends of the shoots affected dipped in; this formed a coating over them and smothered them; it soon became dry and enveloped them. In a day or two it was washed off by means of a garden engine or syringe, soon dispelling it, and the plants were healthy all the season after.—CONDUCTOR.]

ON AURICULA SEED.—I have this season, for the first grown, a collection of Auriculas and Polyanthus's, both have a quantity of seed vessels, when it ripens, how am I to proceed. A reply will confer a favour on

A COUNTRY CURATE.

[When the seed is ripe, which will be by the end of July or August, save it, not in a hot situation, but dry, till the February following, then sow it in shallow pans, raise in moist heat, as soon as up, remove to a somewhat cooler situation, and when the plants are strong enough, take them up entire and pot into smaller pots and treat as the Auricula usually is. See excellent articles in former Numbers of the CABINET.—CONDUCTOR.]

ON LISIANTHUS RUSSELLIANUS.—What affinity has the Lisianthus Russellianus? By informing me you would greatly oblige

Cambridge. T. N. C.

[It is of the natural order Gentianeæ, nearly the form of the dwarf spring flowering Gentian, but about three times the width of that flower. A figure is given of a smallish sized bloom in a former Number of this work.

CONDUCTOR.]

ON DOUBLE VIOLETS, &c.—A Subscriber begs to know if there are such plants as a bright scarlet double Violet, also a double white Hepatica, and where they are to be procured; also where the double white Violet and double Lily of the Valley are to be purchased.

BURCHELLIA CAPENSIS.—Observing a remark in the May Number on grafting the Luculia gratissima on Burchellia Capensis, I am desirous to know where, and at what price, I can procure plants of it.

[At most of the principal nurseries, and the price about 1*s*. 6*d*. each. If obtained it readily increases by cuttings of the roots, pushing from the joints.

CONDUCTOR.]

## REMARKS.

REMARKS ON THE CULTURE OF ORCHIDEOUS PLANTS, BY JAMES BATEMAN, ESQ., as given in his very valuable Work published under the title of "The Orchidaceæ of Mexico and Guatemala.—The work far exceeds all others in its entire completion, and with each figured specimen are valuable remarks on the culture, but the condensation of the general mode of treatment Mr. Bateman details as follows:—"And now as respects the leading points in cultivation. Supposing the plants established in a suitable house—which is an indispensable preliminary—the following rules will be found to contain all that is most essential for their successful management.

"1st. The plants can scarcely have too much light or too little sun.

"Light prevents mildew, strengthens the fibre, and checks the disposition to throw up a succession of weakly shoots, which are quite incompatible with the production of flowers. The sun, on the contrary, scorches and turns the leaves yellow, especially when it first begins to shine powerfully upon plants that have just left their winter quarters. In order to secure as much light as possible, many species should be suspended in the air from rafters or chains, some being placed on blocks of wood (cork-wood is the best), or fragments of cocoa-nut husks, and others in baskets of wire or wicker-work filled with moss and broken peat, or in pots with pierced sides. The latter answer perfectly for plants (*e.g.*, the Saccolabiums), which are of slow growth, and thrust their roots into the air. Baskets answer best for Stanhopeas and the like. To prevent injury from the rays of the sun, shading is of course necessary, but this should be so arranged as to be easily removed, as it ought not to be continued for more than ten or twelve hours on the very longest summer's day. Exotic climbing plants introduced sparingly are advantageous, and have a good effect.

"2nd. Take care of the roots.

"On the health of the roots everything depends. The winter is with them the most critical season, for if suffered to grow too dry they shrivel up and perish; if too wet they rot. Much, of course, depends upon the mode in which the plants are potted, and which should be such as to admit of their readily parting with all superfluous moisture; and to secure this nothing is better than a plentiful admixture of broken potsherds. High-potting is now so generally practised in good collections, that it is needless to insist upon its importance. Rapidly-growing plants, such as the different species of Phaius, Gongora, Peristeria, Stanhopea, &c., require to be broken up and entirely repotted every second or third year; on the other hand, there are some air-plants, &c. that may remain undisturbed for five or ten years together.

"3rd. Beware of noxious insects.

"Orchidaceæ are more particularly exposed to the attacks of the following insects:—woodlice, crickets, and cockroaches, the thrip, a minute woolly white scale, and a diminutive species of snail; the two last being infinitely the most pernicious. Woodlice are easily kept in check by placing the plants on saucers, or within troughs filled with water, especially if the valuable aid of a few toads be called in. The 'Oniscamyntic Epiphyte-stand,' invented by Mr. Lyons, is an ingenious and, no doubt, effectual way of accomplishing the same end. It is made by merely fixing a forked branch, or block of wood, to the raised centre of a massive saucer or feeder, which, being kept constantly full of water, forms a sort of foss—impassable to vermin—round the plant it is intended to guard. Crickets and cockroaches are very fond of flower-scapes, and to be dreaded accordingly. Red wafers scattered over and among the pots are to them very tempting baits, and, if swallowed, the red lead they contain acts as a poison, but these pests are best destroyed by the mixture recommended for the white scale. The thrip does not do much mischief, except where plants are either neglected or grown in too hot and dry a temperature. It usually first appears among the Cataseta, and is to be removed by careful washing. Small snails abound in some collections, while in others they are unknown; it is difficult to conjecture whence they come, and all but impossible to eradicate them entirely. They batten upon the tenderest roots, such as plants put forth when they are just beginning to grow, and if not kept in check would speedily produce irretrievable mischief. Lettuce-leaves, slices of potato, turnip, &c., are very enticing; and while they divert the attention of the enemy from the roots, they also afford an opportunity of capturing him. The collections which are watered exclusively with rain-water are the least infested. But the worst plague of all is the small white scale, which, in its first insidious approaches, appears only as a white speck upon the leaves, then covers them with a soft whitish down, and finally kills them. For this the following remedy will be found efficacious; viz., dissolve half a pound of camphor in a pint of spirits of wine; the result will be an impalpable powder, to which add one pound of Scotch snuff, one ditto pepper, one ditto sulphur, and keep in a bottle (carefully stopped). This mixture should be dusted over the infected parts, and repeated whenever or wherever the enemy shows itself. If persisted in for some time, the mixture rarely fails to effect a perfect cure; and it has the further good property of acting as a most deadly poison to cockroaches, &c., which have quite disappeared in the collection at Knypersley since this mixture came into frequent use. Besides the above annoyances, the red spider and the brown scale are frequently injurious, but never except in cases of gross neglect.

"4th. Give the plants a season of rest.

"Without a season of rest most plants will not flower at all, and others do so very imperfectly. It is easily accomplished in a variety of ways, either by moving the plants from the warmer to the cooler end of the house; or by diminishing the quantity of water, or by placing them in a cooler house. Even exposure in a hot, dry atmosphere, although it scorches their leaves, not unfrequently throws them into vigorous flower. Plants from the East Indies, and from other climates, where the extremes of drought and wet are not felt so severely as in *Brazil* or *Hindostan*, require a season of rest proportionably short, *and of a less decided character.*

"*5th. Attend to the condition of the air.*

"*In winter 60° to 65°* is a wholesome temperature for most of the species; in the summer it may rise to 70° or 75°, or even higher if derived from the heat of the sun. Where there are two houses, the warmer one should not be lower than 70° even in winter; but, fortunately, there are comparatively few kinds that insist upon so hot a berth. The air should always be soft, and nearly saturated with moisture. The latter should, however, be prevented from dripping upon the plants as it condenses; and this is easily effected by fixing a small copper-pipe, or piece of channelled wood, under each rafter and sash-bar, to catch and carry off the water.

"6th. Do not over-water.

"This a beginner is very apt to do, and a grievous fault it is. When plants do not shrivel or flag, it is a sign that they are content with the humidity that the atmosphere of the house supplies. When watering is necessary, it should not be done indiscriminately, but according to the wants of particular plants. It is also of great importance to use rain-water only, which may be collected for the purpose in a tank, as shown in the plan of Mr. Rucker's house, and which should not be applied of a temperature below 60°. Syringing in moderation may be had recourse to in hot weather. Some of the Sobralias, together with Bromheadia palustris, grow more vigorously if their pots are set in saucers of water during the summer months.

"To the foregoing rules the following advice may be added:—'Do not aim at having too large a collection, but rather strive to grow a few good kinds in the best style.' With moderate care and in a moderate-sized house, the whole of the plants enumerated in the subjoined 'Century,' will thrive apace and bloom freely; and he whom such a brilliant assemblage fails to satisfy must be an ardent collector indeed."

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GENTIANA ACAULIS.—Last year attention was called in the CABINET to this beautiful blue flowering spring ornament, and it was recommended as an edging for walks. I procured a quantity at 3*d*. each, and planted the walks of a small flower garden with it, and ever since the middle of March, it has been in profuse bloom. My soil is a sandy loam, in which it thrives well. As a successor to the Gentian when out of bloom, I had a quantity of what the Conductor of the CABINET advised as one for the edging of a flower-bed in summer, viz., Lobellia erinus grandiflora, and I planted a row of it close behind the Gentian, and now, (May 18th,) it is spreading among the same, and coming into bloom, and with its lovely blue and white spotted flowers, I doubt not, will be a pretty ornament to the autumn.

Cirencester.

LUCY.

## ROYAL BOTANIC SOCIETY OF LONDON.

June 4th. The plants, generally speaking, were in excellent condition. The Heaths were numerous, and attracted much attention; well-grown specimens of that beautiful tribe composing the greater part of some collections. There was a beautiful plant of Barkeria spectabilis, covered with delicate lilac blossoms, from Mr. Brewster, gardener to Mrs. Wray, of Cheltenham; a most beautiful dark variety of Stanhopea tigrina, having numerous pendent spikes of large flowers, from Mr. Robertson, gardener to Mrs. Lawrence; and a large specimen of Dendrobium densiflorum, finely in flower, from Mr. Mylam, gardener to S. Rucker, Esq. In addition to this, Mr. Mylam exhibited Aerides odoratum in wonderful health, Oncidium pubes, Epidendrum cochleatum, in good condition; Saccolabium guttatum, having four charming racemes of delicate purple blossoms; a small Oncidium Lanceanum, together with a well-grown plant of Epidendrum crassifolium, the beautiful Phalænopsis amabilis, and Oncidium flexuosum. In the same collection were also Maxillaria vitellina, Stanhopea saccata, Aerides odoratum, producing a fine spike of bloom; Odontoglossum hastatum, a Brassia, and two Epidendrums. Mr. Hunt, gardener to Miss Traill, sent good specimens of Maxillaria aromatica, Aerides odoratum, Oncidium luridum guttatum, Vanda Roxburghi, Calanthe veratrifolia, Oncidium Phillipsianum, having fine spikes of yellow and brown blossoms; Gongora atropurpurea, in excellent condition; together with Broughtonia sanguinea, Brassia, Henchmanni, a pretty Stanhopea oculata, and a good Aerides odoratum. From Mr. Barnes, gardener to G. W. Norman, Esq., were Stanhopea tigrina, S. insignis, and S. quadricornis; also Aerides odoratum, Vanda Roxburghi, and the handsome Cattleya Mossiæ. Collections of Orchidaceæ were also supplied by Mr. Redding, gardener to Mrs. Marryatt, and G. F. Cox, Esq., of Stockwell. Of Heaths, Mr. Barnes produced E. vestita alba, blooming profusely; a dwarf bushy E, ampullacea, E. depressa, well cultivated, and a beautiful E. perspicua nana, together with a large E. grandinosa covered with blossoms, E. mundula, E. Cavendishii, and a dwarf bushy E. tricolor. Mr. May, gardener to E. Goodheart, Esq., Beckenham, sent a collection, comprising, among others, Erica vestita, E. perspicua nana, in a lovely state; E. odora rosea, small but well-grown; E. propendens, well cultivated; the old E. splendens, and a large bush of E. daphnæflora; the handsome E. ventricosa alba, and a good hybrida. In a group contributed by Mr. Bruce, gardener to B. Miller, Esq., was a fine Erica Cavendishii, small plants of E. splendens and tricolor, the beautiful E. venticosa superba, the small neat-flowering E. Bergiana, and E. ventricosa coccinea minor. Mr. Jackson, of Kingston, exhibited among others, Erica depressa, in fine condition; E. ventricosa breviflora, well-grown; a fine specimen of a new E. tricolor, a well-grown E. elegans, together with E. vestito coccinea, E. inflata rubra (a beautiful variety), and a pretty E. Cavendishii. Mr. Jackson also showed a beautiful large seedling Heath, named E. Eassoniana. Mr. Brazier, gardener to W. H. Storey, Esq., sent E. ventricosa alba, E depressa (in excellent health), E. ventricosa superba (blooming profusely), fine plants of E. vestita alba, E. Cavendishii, and E. gelida, the latter covered with bloom. In Mr. Brazier's collection were also E. intermedia, E. floribunda, and E. vestita purpurea, the latter very handsome. The collection by Mr. Green, gardener to Sir E. Antrobus, Bart., contained beautiful specimens of E. perspicua nana, and E. depressa; also E. intermedia, in excellent condition, and E. gelida, together with E. ventricosa superba, the beautiful small-flowering E. propendens, E. ventricosa carnea, and E. dilecta. An extra prize was awarded to J. Wells, Esq., Bromley, for four Heaths, in good condition. Mr. Dawson, of Brixton-hill, showed E. perspicua nana, laden with flowers; also E. massoni, the almost ever-flowering E. mutabilis, a fine E. prægnans, and E. odora rosea, well cultivated, together with E. Humeana, and E. depressa, the latter in excellent health. In the collection sent by Mr. Frazer, of Leyton, was E. pendula, a well-managed E. ventricosa globosa, E. perspicua nana, in a lovely state, and many other species equally well-managed. Mr. Brazier sent a collection of hybrid Vestitas in fine condition, in which were some good varieties, especially one named E. floribunda, having long pale-yellow blossoms. Among single specimens of Heaths, there was a large well-grown E. depressa, particularly noticeable, from Messrs. Veitch and Son, of Exeter. Mr. Fairburn, of Clapham, contributed small but well-grown specimens of E. intermedia, E. tricolor, in fine health. a beautiful ventricosa carnea, and other varieties of ventricosa, in equally good condition. Mr. Clarke, gardener to W. Block, Esq., exhibited E. dilecta, E. ventricosa superba, in profuse bloom; and a large E. vestita fulgida. From Mr. Pawley, of Bromley, was Erica mundula, finely in bloom; a beautiful E. perspicuana, E. vestita coccinea, E. depressa, in remarkable health; and several other species that equally indicated good management. Of collections, that exhibited by Mr. Barnes, contained many good specimens, and among others a thriving plant of Leschenaultia formosa, a fine Baronia denticulata, Aphelexis humilis, in good condition; Ixora coccinea, well-managed; a good Rondeletia speciosa, Clerodendrum squamatum, large and fine; Leschenaultia biloba, producing its azure blossoms in abundance; together with Phœnocoma prolifera, and Aphelexis sesamoides, which was rich in blossom. Mr. Hunt showed, among other plants, a beautiful Leschenaultia formosa, covered with bloom; a good Clerodendrum squamatum, a large Euphorbia splendens, a pretty Pimelea rosea, a fine plant of Ixora coccinea, together with a well-managed Gompholobium polymorphum, trained on a wire trellis; and a beautiful Pimelea decussata. In the same collection were Eutaxia myrtifolia, a beautiful Chorozema cordatum, Clerodendrum squamatum, in excellent health; a pretty Polygala cordifolia; also Oncidium flexuosum, a large Chorozema cordatum macrophyllum, and a good Russelia juncea. Mr. Atlee sent Sprengelia incarnata, a large Baronia denticulata, Ixora coccinea, Polygala oppositifolia, in good condition; Epacris grandiflora, and a pretty plant of Genista rhoopnœa. From Mr. Slowe, gardener to W. R. Baker, Esq., Bayfordbury, was a large Mimulus glutinosus, a fine Selago Gillii, Calanthe veratrifolia, producing several spikes of white blossoms; Cactus Jenkinsoni, in good condition; a well-grown Siphocamphylus betulifolius, and a well-managed Hardenbergia longiracemosa. Mr. Slowe also exhibited Bossiæa linophylla, a large Vinca alba, Nerium splendens, and a seedling Calceolaria, about four feet high. Mr. Green exhibited, among other plants, Gnidia pinifolia, a well-grown Chorozema Dicksoni, a tolerably good Dillwynia speciosa, a pretty Siphocampylus betulifolius, Stephanotus floribundus, trained on an upright circular trellis; Pimelea linifolia, a beautiful Azalea lateritia, Chilodia scuttellaroides, a well-grown Leschenaultia biloba, in good condition; Azalea variegata, covered with blossoms, and a beautiful large Colenoma rubra, in fine health. From Mr. May was a collection, in which was Leschenaultia formosa, particularly good; a well cultivated Ixoria coccinea, pretty plants of Azalea variegata, and A. lateritia; a large Pimelea hispida, and a fine specimen of Cactus Ackermanni. Mr. Bruce sent Aphelexis humilis, in fine condition; good plants of Oncidium flexuosum, Leschenaultia formosa, and Adenandra speciosa, together with Ixora coccinea, and a noble specimen of Pimelea spectabilis. From Mr. Clarke was a pretty Gesnera splendens, Oncidium flexuosum, producing fine spikes of flowers; a large Euphorbia splendens, Abutilon striatum, trained over a wired trellis; a pretty plant of Fuchsia fulgens, and a small Aphelixis humilis, densely covered with flowers. An extra prize was awarded to Mr. Taylor, gardener to J. Coster, Esq., for a good Siphocampylus betulifolius, a large Diplacus puniceus, and some Heaths. Mr. Pawley sent, among other plants, Aphelexis sesamoides; well-grown Boronia viminea, covered with small pink blossoms; Gesnera reflexa, with large scarlet flowers; and a good Nerium splendens. In Mr. Frazer's group was Philibertia Cunninghamii, covered with bright-yellow blossoms; a small Boronia serulata, evincing good management; a good Epacris pulchella, a noble plant of Statice arborea, and a large Euthales macrophylla. Mr. Catleugh had, among other plants, a beautiful Azalea, called Fulgens Superba, with large, showy, bright-red blossoms; a good Azalea variegata, grown as a standard; Plumbago capensis, exceedingly well managed; a fine specimen of Fuchsia exoniensis, about five feet high; and a pretty plant of Cytisus canariensis. Collections of Climbing Plants were shown by Mr. Green, Mr. Frazer, and some single specimens by other growers. Mr. Green's plants were Tropæolum azureum, trained on a wire trellis; a pretty T. tricolorum; T. edule, with pretty yellow flowers; nd a good T. tricolorum grandiflorum. Mr. Frazer's were Sollya augustifolia:

a beautiful Gompholobium versicolor, twining over a wire trellis; G. polymorpheum, Hardenbergia longiracemosa, H. monophylla, exceedingly well managed, and a good Sollya heterophylla.

## HORTICULTURAL SOCIETY.

June 4th. Sir C. Lemon, Bart., M. P., in the chair. Mr. Rollisson obtained a Knightian medal for a new Aerides, from Bombay, like A. crispum. A specimen of Oncidium concolor, from W. C. Alston, Esq., of Birmingham, received a Banksian medal. This has yellow flowers. A specimen of Oncidium pulvinatum was shown by Mr. A. Scott, gardener to Sir G. Staunton, Bart. Some things came from Messrs. Loddiges, viz., Dendrobium Dalhousieanum; a large plant of Catleya Mossiæ, and one of Lælia majalis, to these a Knightian medal was awarded. Epacris miniata, a new shrub from Messrs. Loddiges, with rich vermilion flowers like those of E. grandiflora; it received the large silver medal. Some rare plants from the Royal Botanic Garden, at Kew, shows that the abuses there have not ceased. Here Dr. Hooker unwarrantably takes plants from where the public have a right to see them, to a place where the public have no right, and that as it were to injure a show held by the Botanic Society the same day, to which, however, by the desire of Sir William Hooker, no medals were assigned; they consisted of Thunbergia chrysops, a new species from Sierra Leone, with large flowers of intense purple, enlivened by a golden-yellow eye. Another was the Franciscea hydrangeæ formis, a valuable stove shrub, from Brazil, with heads of fragrant vio et blossoms; a third was Gloxinia (or rather Gesnera) tubiflora, with long white trumpet-shaped blossoms, cream colour. Alpinia nutans, from the garden of W. Everett, Esq., of Enfield. Mr. Glendinning exhibited three seedling Gloxinias, with rose coloured flowers. For two of them the Banksian medal was given; the third a Self, was not included in the award. Mr. Chapman sent some good British Queen Strawberries, and Mr. Fleming, gardener to his Grace the Duke of Sutherland, three Cabul Melons, with the appearance of the Hoosainee. Mr. Fish, gardener to H. Oddie, Esq., of Barnet, produced a green-fleshed Melon, weighing nearly 5 lbs., for which a certificate was given; and a bunch of Grapes that appeared to be quite new; the variety had been obtained by Mr. Fish, between the White Frontignan and Dutch Sweetwater, and exhibited the long narrow bunch of the former with the larger berries of the latter; when tasted it proved to have an agreeable Muscal taste, and was considered a good sort, well deserving the certificate that was allotted to it. Mr. W. Dunsford sent from Mr. Everett's garden, at Enfield, specimens of a new sort of Kidney Bean, the Dolichos sinensis, with young eatable pods, two feet long; they were described as being of an excellent quality when cooked like Kidney Beans.

London Horticultural Society's Thirty-second Exhibition of Plants, &c. took place in the Chiswick Gardens on Saturday, June 15th.—There were 13,500 tickets issued. The King of Saxony, Prince Albert, Duke of Cambridge, and the Duchess of Gloucester honoured the exhibition with their attendance.

There were numerous well-grown specimens exhibited; and although we have seen a greater quantity shown on some former occasions, we do not recollect seeing them in such profuse and fine bloom as on this.

In new plants we noticed the following:—*Epacris miniata* (figured in the present Number of this Magazine). The plant was somewhat bushy, three feet high, and in profuse bloom; it does not grow so straggling as E. grandiflora, and is a very interesting plant. A first prize was awarded for it to Messrs. Loddiges.

*Viscaria oculata.*—Mr. Jackson, of Kingston Nursery, exhibited a beautiful specimen of this new annual (figured in a recent number of this Magazine); it was four feet high, with numerous lateral branches, very profusely in bloom, and strikingly handsome. It deserves to be in every greenhouse and flower garden.

*Gompholobium splendens*, by Mr. Green, gardener to Sir E. Antrobus, Bart. The flowers are about the size of G. polymorphum, but of a rich yellow. It is a

*Pentas carnea*, by Mr. Ayres, gardener to J. Cooke, Esq., of Brooklands. The plant was two feet and a half high, with ten corymbous heads of its pretty lilac-pink blossoms.

*Veronica speciosa*, by Mr. Ingram, of Windsor Castle gardens. The plant was three feet high, having thirteen fine spikes of its pretty blossoms (figured recently in this Magazine); it deserves cultivation in every greenhouse.

*Clerodendron infortunatum*, by Mr. Glendinning, of Chiswick. The plant was two feet and a half high, with a fine panicle of bright scarlet flowers. It well merits a place in every stove. Achimenes picta, a foot high, not near so well bloomed as we have seen elsewhere, nor were the flowers so handsome, probably being injured by the mode of treatment it had received in order to push it into bloom for the occasion.

*Gloxinias*, three seedlings; 1st, named G. cartoni; outside of tube rose-coloured, the limb portion is margined with white, and the inside of the flower white with faint stripes of rose; it is a very pretty variety. 2nd, a pale flesh colour outside, and nearly white inside, also pretty. 3rd, a pale blue, with a dark coloured inside, and a lighter stroke down the lower inside of the tube.

*Pavetta Caffra*, by Mr. Slowe, of Bayfordbury, in Herts. The plant is usually large before it blooms, but this was only half a yard high, having a fine head of its lovely white flowers.

*Pterodiscus speciosus*, by Mr. Smith, of Kew Gardens. The flowers have a resemblance to Martynia, or between the Gloxinia and some of the Mimuluses, of a dull reddish-purple. The plant is half a yard high.

*Ixora acuminata*, by Messrs. Lucombe, Pince, and Co. Plant three feet high, the leaves are like those of a fine Magnolia; it had an head of several hundreds of pure white flowers. Cyrtocercis reflexa, plant three feet high, having Asclepias-like heads of yellow and white blossoms.

*Rondeletia speciosa*, by Mr. Dobson. The plant half a yard high, literally covered with heads of its beautiful orange-red flowers. This plant is generally grown long and straggling, but the present specimen was low, and formed a compact bush.

*Erica Massoni major*, a plant three feet high, in fine bloom, by Mr. Jackson.

*Dracophyllum secundum*, by Mr. Jackson, a pretty plant, with drooping green flowers.

*Hindsia longiflora* and *H. violacea*, by Messrs. Veitch. Cut specimens of both these pretty flowers were exhibited.

*Erica ventricosa alba*, by Mr. Robertson. Plant three feet high, most profusely in bloom; and E. depressa, with greenish-yellow flowers, plant three feet, a beautiful specimen.

*Achimenes longifolia*, by Mr. Falconer. Two feet and a half high, and as much across, very profusely in bloom. Leschenaultia formosa, three feet high, a very compact bush, and one mass of bloom.

*Lilium testaceum*, by Messrs. Mountjoy, of Ealing nursery. The flowers are of the turn cap form, large, and of a beautiful pale fawn colour; the flower stem was four feet high.

Azalea Indica variegata, lateritia, and Gledstanesii had been grafted on one stem, and the three in profuse bloom, was exhibited by Mr. Green; the plant was three feet high.

*Pelargoniums.*—AMATEURS' Class, 12 new and first-rate kinds, in pots, 24s. 1st Prize, Mr. Cock, of Chiswick, for Paragon, Sir R. Peel, Eclipse, Emma, Hebe, Queen of the Fairies, Black Dwarf, Erectum, Sarah, Garth's Queen Phillippa, Maid of Honour, and Unit. They were dwarf robust-grown plants, in vigorous health and bloom.

2nd Prize, Mr. Dobson, for Susanna, Majestic, Matilda, Queen of the Fairies, Bella, Leonora, Martha, Serjeant, Flora, Conflagration, Angiola, Sir R. Peel, and Susanna.

3rd Prize, Mr. Coysh, of Clapham, for Beauty, Nymph, Prince Albert, Comte de Paris, Venus, Erectum, Sylph, Lord Mayor, Phillis, Matilda, Priory Queen, and Madeline.

NURSERYMEN'S Class.—12 new and first-rate in 24s. 1st Prize, Mr. Gaines, for Queen of Beauties, Oberon, Coronation Superb, Beauty Supreme, Witch, Orange Perfection, Pirate, Clio, Rising Sun, Princeps, Hermione, and Princess Royal.

2nd Prize, Mr. Catleugh, for Conflagration, Luna, Sultana, Flash, Paragon, Emma, Taglioni, Madeleine, Maid of Honour, Sarah. Laura. There were three competitors in the Amateur's Class of twelve varieties, in pots of 12 to the cast. The silver gilt medal in this class was awarded to Mr. J. Parker, gardener to J. H. Oughton, Esq. This collection comprised 12 very finely cultivated varieties, uniform in size, and in perfect health. Victory, Ovid, Rienzi, Jubilee, Rosalind, Annette, Evadne, Priory Queen, Arabella, Erebus, Lord Mayor, and Comte de Paris. The large silver medal was awarded to Mr. Cock for the following well-selected sorts:—Hector, Sultana, Queen of Fairies, Wizard, Symmetry, Hebe, Constellation, Paragon, Rising Sun, Rachel, Nestor, and Lord of the Isles. 3rd, Silver Knightian to Mr. W. Bromley, gardener to — Anderdon, Hammersmith, for Annette, Sylph, Grand Duke. Priory Queen, Exquisite, Una, Victory, Erectum, Piba, Leila Jones, Clarissa, and Coronation. In the Nurserymen's Class, the contest again lay between Mr. Gaines and Mr. Catleugh, the former taking the 1st Prize. silver gilt medal, for Juba, Albina, Lifeguardsman, Lady Cotton Shepherd, Pride of Surrey, Mabel, Arabella, Gem of rhe West, Priory Queen, Lady Sale, Madeleine, Alba Perfecta. Mr. Catleugh's flowers were Dido, Luna, Nestor, Selina, Hannah, Priory Queen, Madeleine, Lord Mayor, Comte de Paris, Hebe, Amulet, and Witch. The silver Banksian was awarded to Mr. Bourne, gardener to Sir E. Paget, for six varieties in pots of eight to the cast, Lifeguardsman, Matilda, Erectum, Victory, Nymph, Madonna.

Seedlings.—Several of merit were exhibited, not an improvement in form, but for singular rich or unusual colours. The judges selected the following for prizes. We give the descriptive list of the others below. Sir J. Broughton, a well-formed, compact, but rather small flower; colours high and fine, blotch on the upper petals dark and fine, graduating to the edge, which is narrow, and a bright crimson-rose; it has a small white centre, with rich purple-crimson under petals. Exactum, good cupped flower resembling the former, but larger, and a few degrees lighter in colour; these two flowers were exhibited by Mr. Whomes, gardener to E. Foster, Esq, Clewer Manor. Titus, from Mr. Hoyle, of Guernsey, a well-formed flower, rosy under petals with light centre; dark rich velvety upper petals, with a distinct margin of bright rosy-carmine. Desdemona, Mr. Dobson, gardener to Mr. E. Beck, a fine full-sized flower of good form; under petals tinged with delicate pink, upper petals large, stout, and of a velvety texture, of a rich maroon colour, which runs to the base of the petal, and also leaves a distinct margin of delicate rose-colour round the petals.

The *Calceolarias* exhibited this year have not been equal to those of former seasons, either in the goodness of the sorts or in their cultivation. The Amateurs', which were decidedly the best, were from Mr. Stanley, gardener to H. Berens, Esq.; to these the large silver medal was awarded; the sorts were Jewess, Magnifica, Gipsy, Auro Maculata, Duke of Cornwall, and Vivid. The Nurserymen's collection was from Mr. Gaines, and contained Candidate, Lady Elcho, Magnet, Mabel, Sunbeam, and Tigrina.

Two collections of *Fuchsias* were exhibited for competition; both were under fine cultivation. Mr. Gaines obtained the large silver medal for his collection, which contained the best-selected sorts which have yet appeared—Decora, Robusta, Conspicua arborea, Alata, Curtisii, Majestica, Gem, Venus Victrix, Iveryana, Victory, Excelsa, and Pulcherrima. The other collection was from Mr. R. Laing, of Twickenham, and received the silver Knightian medal; the following sorts comprised this collection—Stanwelliana, Arborea, Insignis, Fulgens, Multiflora, Majestica, Robusta, Laneii, Paragon, Moneypennii, Elegans superba, and Venus Victrix.

A superb collection of *Ranunculuses* was exhibited by Messrs. Tyso and Son, of Wallingford; these flowers attracted much attention from their extreme delicacy and beauty; and, considering the unpropitious season we have had, it must have required great skill and unceasing attention to have produced such fine blooms; the collection contained Temeraire, Candale, Tippoo Saib, Kilgour's Queen Victoria, Princess Royal, Dr. Neill, Coronation, Marquess of Hertford, Ximenes, Queen Victoria, Bon Financier, &c., with the following fine seedlings raised by Messrs. Tyso and Son—Felix, Edgar, Gippius, Grand Romana. Albinus, Herbert, Virginia, Attractor, Dictator, Raphael, Amasis, Jubal, Delectus, Champion. Falcidia, Eureka, Alexis, Comptroller, Tubal, Basilica, Grandis, Adolphus, Phyllis, Silverton, Innocent, Ada Cathcart. Arcadia, Solon.

The *Pinks* were good for the season; the collection to which the silver Knightian medal was awarded, was from Messrs. Norman, of Woolwich, for the following sorts.—Cousin's Queen of the Isles, Creed's Henry Creed, Willmer's Queen Victoria, Young John, Eclipse, Hodges' Gem, Lady Flora Hastings, Melona, Flora, Willmer's Prince of Wales, Cousins's Little Wonder, [Creed's President, Majestic, Unsworth's Omega, Duke of Northumberland, Garrat's Alpha, Bunkell's Lord Brougham, Norman's William, Triumphant, Queen of Roses, W. Cobbett, Gay Lad, Creed's Miss Creed.

THE AFRICAN GUANO ISLAND, ICHABOE.—The island whence the Guano is taken is about three miles from the shore, on the south-west coast of Africa. It is a barren rock, about a mile in circumference; has no soil, or the least sign of vegetation. The Guano lies to the depth of twenty feet, and without any variation as to quality. The continent is very sandy, and in high winds will cover a ship's deck nearly 100 miles off. The birds on the island are a kind of penguin, and cannot fly to any distance. if at all, their wings being a kind of fin. Mr. Parr, who appears to have first visited it, states it is very difficult of approach, there being no harbour. On walking on it he could scarcely set his foot without treading on the birds, and they took no notice of him, except pecking at his feet, he being barefoot. There is no fresh water. it is believed, for some hundreds of miles along the coast, and no rain.—*Edinburgh New Philosophical Journal.*

ON GRAFTING PELARGONIUMS.—On a former occasion I stated that at the end of last July I had grafted half a dozen very distinct coloured Pelargoniums, upon a strong plant of the old vigorous growing variety, Commander-in-Chief, doing it by first heading back to about four inches long the six leading branches, and immediately inserted a graft of another kind into each, in the whip grafting method, having the graft a well ripened shoot of that year's growth. After claying and mossing over the same, I placed it in a close frame, shaded, and sprinkled the foliage over daily to keep it fresh. In three weeks all the grafts were united, and at the end of September I repotted the plant, and now (April 20th) the six kinds are in beautiful bloom in my conservatory, having been gently forced to get them thus early into bloom. The pretty contrast of form and colours of so many varieties in one plant, render it so interesting an object as to deserve the attention of the readers of the CABINET.—CLERICUS.

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ON THE CHINESE IRIS.—Having in my greenhouse one of those beautiful plants the "Chinese Iris," I thought a description of it in its flowering state might be interesting to the readers of the FLORICULTURAL CABINET, and tend, in some degree, to stimulate the cultivation of so pretty a flowering plant. I have one in a large pot, which has several shoots, two of which have sent forth flowering stems, and upon the two appeared last month forty-five bud-blossoms. On the 30th ultimo, fifteen blossoms were open at once, nine on one stem and six on the other, and it has continued to exhibit from seven to nine (and for several days ten to twelve) blossoms every day since. I should not have remarked it so much, but that on referring to Mr. Curtis's "Flower Garden," vol. ii., page 373, he makes mention of one of these plants at Mr. Colvill's, King's Road, on which were counted "seven blossoms expanded at one time on its different branches." Mr. Curtis does not say how many branches the plant had. But if seven was thought by such a botanist as Mr. Curtis. to be worthy of such notice in his work, I think fifteen blossoms upon two branches only (or rather stems) fully expanded at the same time, and nine of them upon one stem, renders mine a rare specimen of the kind. Though from its first expanded blossom it is now about three weeks, there are yet fifteen more blossoms to open.

Chipping Norton. G. M. SMITH.

[It is; we shall be obliged by any remarks on its culture, addressed to us at Downham, Norfolk.—CONDUCTOR.]

ON THE TANK SYSTEM OF HEATING.—Last autumn I had a small greenhouse fitted up to be heated on the tank system, and which I have found to succeed well, keeping up a due degree of warmth, and not (as one of your correspondents, in the last number of the CABINET, states,) "affording too moist an atmosphere for winter to a greenhouse."

My boiler is a small one of Rogers's; the gutters (a proceeding and return one) are fixed along one end and the front of the house. They are raised two feet above the floor, formed of brick, and cemented inside. I have slate coverings, a quarter of an inch thick, over the gutters, and raise one or more at different parts of the gutter, so as to admit a regular portion and distribution of moist temperature in every part of the house.

CLERICUS.

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TANK SYSTEM OF HEATING.—We have visited several establishments where the tank system of heating by hot water in open gutters, &c., were adopted last autumn, and the managers having had a winter and spring experience, they were enabled to speak of its merits.

For heating a greenhouse, conservatory, or pit, where what is termed greenhouse plants of the usual kinds, are grown, the moisture is found to be so excessive, that they have been completely saturated and many damped off, although the usual precaution was taken by slate covers to check the moisture.

It had been employed in several instances to heat pits, by having the tank or troughs extending along underneath, but even then the moisture had come through the bank or soil too much, and there had been a fire flue constructed along the front of the pit, in two instances, in order to dry up the excess of moisture in the upper space. The fire flue was heated from the boiler fire. This had answered expectation. A house, or pit, so constructed, to confine the moisture under the materials of the pit, to plunge pots of cuttings in, answers well from March to October, and the best material to plunge the pots in is fine bed or river sand. We saw a pit with numerous pots of cuttings in flourishing amazingly, and almost universally succeeding.

A few pipes had passed through the sand from the chamber to the upper space; when moist vapour was required for the upper space, the plugs, which were put in the tops of the pipes, were taken out for the period required.

For Orchideæ and other plants which can bear excess of moisture, the plan of heating in open troughs may do; we shall give particulars of such in our next. Of the construction, &c., of boilers, troughs, and tanks.

CONDUCTOR.

ON AMERICAN, OR MEALY BUG.—Having a Chinese Apple-tree in my shrubbery, it had for two years become infested with the Mealy, or American Bug. In order to destroy it, in February 1842, I took a quantity of the finest brickmakers' clay from a brickyard, and carefully coated the tree over with it, as far as the insect infested it. This, by excluding the air from the insects, soon destroyed them. The coating came off by natural causes. I kept the diseased portions plastered over the entire year, and it so answered the purpose that not a vestige of the insect has been seen since February, 1842.

Andover. CLERICUS.

ON THE SPOTTED LEAVES OF PELARGONIUMS.—Last year I forwarded some leaves of Pelargoniums which were frightfully spotted, as if affected by mildew.

I desired the favour of any reader of the CABINET who would do it, to favour me with a remedy. My request remaining unanswered, I beg to observe, I am again pestered with the infliction, I shall be glad of early advice, my entire stock of plants is now infected with it. Plants in my greenhouse, and cool frame, are alike injured.

May 10th. W. W.

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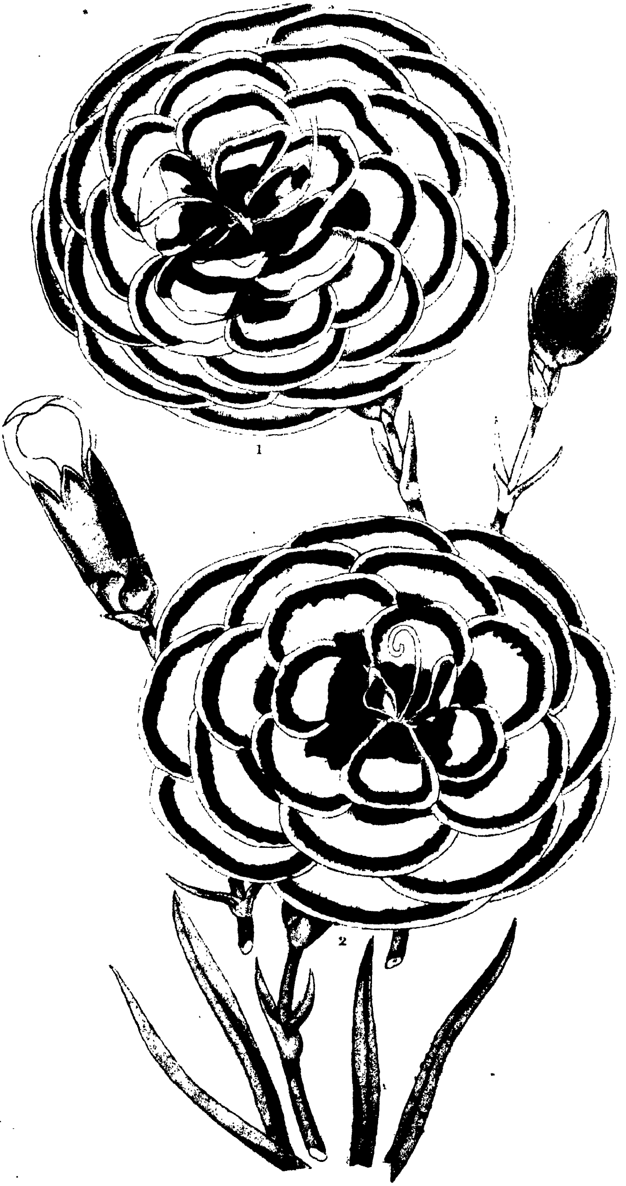
HYBRID RHODODENDRONS.—Noticing that the two previous years the Conductor has given in the CABINET a list of the finest Hybrid Rhododendrons, in the collection of Mr. Watever, as shown each season at Chelsea, I hope, although I find there is not be one this season, that you will endeavour to give us the annual descriptive list of new kinds. The Rhododendron tribe is one I much admire, and have for a few years paid some attention to raising seedlings, between the high coloured tender kinds and the hardy ones, and this season, I have several in bloom, which are perfectly hardy, and the colour of R. altaclarence. I have many plants which have been raised between the R. altaclarence, Russelliana, Pulcherrima, and others of a similar high colour with the white flowering R. ponticum, maximum, and roseum; I anticipate a beautiful display from them. I am glad to observe, that from time to time, you have urged the readers of the CABINET to pay attention to hybridizing the most distinctive kinds, to produce a more extensiue lovely variety. As the plants are now in bloom, I hope attention will be paid to impregnating the blossoms, &c.

Berks. CLERICUS.

## FLORICULTURAL CALENDAR FOR JULY.

THOSE annual plants that have not yet been transplanted out, should now be done, in cloudy and showery weather, keeping as much earth to their roots as possible, and supporting those with sticks that require it; they will bloom well in August and September. Tender annuals may now be turned out into the flower borders; they should be refreshed at least once a day with water, and if the sun is very powerful they will require to be shaded, till they have taken fresh root; those that remain to flower in pots must be frequently supplied with water, repotting, &c., as they require it. Finish transplanting perennial and biennial plants sown in spring. Double Sweet Williams should now be laid. Those Carnations in pots require particular attention in keeping them well supplied with water, and to support the flower stems by tying them to neat green sticks with bass; pipings of the young shoots may still be put in; those cut at the second or third joints make the handsomest plants; they should be kept shaded from the hot sun, otherwise they will soon get scorched and dried up; they should be finished layering by the middle of the month. Pinks may still be propagated by pipings as in June. Auricula plants in pots will require a little water frequently in hot weather, taking care not to pour it on the heart of the plant; all dead leaves should be removed; if any of the plants are attacked with the green fly they should be smoked with tobacco, or sprinkled with tobacco water. Transplant seedling Auriculas and Polyanthuses, and keep them in a shady place. Pansies may still be propagated by slips of the young shoots; the seed should be sown either in pots or borders, in a shady place, and well supplied with moisture. All sorts of Roses (with the exception of the China and its varieties) should now be budded. Many sorts of bulbous-rooted plants, as Ranunculuses, Tulips, Anemones, &c., which will now be past flowering, and their leaves decayed, should be taken up, well dried, cleaned, and the offsets separated, and put in a cool, airy place, till the planting season again commences. The double scarlet Lychnis, and such like plants, should be propagated by cuttings. Geraniums may now be increased by cuttings. Dahlia cuttings will easily take root if placed in a brisk heat. Continue to cut box edgings, and hedges, where it was not done last month. Mignonette now sown will bloom well in September, Pelargonium cuttings should now be put in, so as to have well-established plants for blooming next year, or for growing in next year, so as to prepare them for extra specimens for the year following.



*Seedling Pinks.*

*1. Queen of Roses. 2. Duke of Northumberland.*

THE

FLORICULTURAL CABINET,

AUGUST 1st, 1844.

# PART I.

## EMBELLISHMENTS.

### ARTICLE I.

### DIANTHUS PLUMARIUS. THE PINK.

1. Queen of Roses, (Garrett's). 2. Duke of Northumberland, (Headly's).

These varieties were exhibited, in the collection of Mr. Ward, of Woolwich, at the London Horticultural Society's show on June 15th, 1844, and in their respective classes were far superior to any others then shown.

The following is the mode of treatment pursued by one of the best pink-growers in the southern part of this country, judging from the number of prizes he has obtained at the floral exhibitions:—

"Having been an extensive cultivator of pinks for many years, induces me to send you the method I adopt, for the propagation and culture of that flower. Propagation is by piping, being the most safe and expeditious plan. About the third or fourth week in June I begin piping, choosing a southern aspect in the most airy part of my garden; and I always choose my mould of an open texture, worked finely with a spade for the first four inches, and for the next two inches I sift some mould through a fine sieve, with one-fourth of drift or river sand laid on the top of the above. I then take a straight-edged board, and level it all over; the length and breadth of the bed to be regulated according to the quantity to be piped; since I have been a dahlia-grower, I have struck my pipings where I have struck my dahlias. Having removed the frame I take off the top surface until I come to the dung, I then take a fork and shake as much of the dung as will cause a gentle heat; I afterwards lay a piece of old matting on the top, to prevent the worms from working up, covering it over with the mould as above described; the next object being to select the most rare and new sorts, which I pipe first, covering them with glasses varying in size from four to twenty-two inches square, using the small ones for the best sorts, I generally take the grass or side shoot from the plants with the number stuck to them, keeping each sort separate; I then proceed to cut off the pipings, stripping the leaves to the second joint, and with a sharp knife cut them close under the joint, taking care not to injure it. In those sorts in which the joints are shorter, I cut the third or fourth joint, and as I cut them I place them in small pans of water to stiffen, which causes them to enter the ground more freely, taking care to keep each sort separate. I then take the glasses and make a print in the mould with them; I next proceed to take each piping singly, and stick them into the mould up to the first joint, three-quarters of an inch apart; after having filled the space I proceed to give them a gentle watering, taking care not to put the glass down close until they are dried, or it will cause them to damp off; I proceed in this manner until I have gone through the whole of my collection, being particularly careful to shade them from the mid-day sun, which I do by placing hoops across the piping place, covering them with matting from eight in the morning till five in the evening, giving them the full benefit of the morning sun till eight o'clock; in the course of three weeks many of the glasses may be taken off, and at the end of six weeks most of them will be fit for planting out into the bed, which should be prepared ready to receive them, planting them three inches apart in the rows, and each row four inches apart. In the middle of September I generally begin to make up my bed for blooming, having it four feet wide with border boards above the level, I take out one spit of earth from end to end, replacing it with a layer of horse or cow-dung quite rotten four or five inches thick all over the bed; I then cover it with about six inches of earth, keeping it three inches higher in the centre, gradually sloping to the edge, after which I mark out the bed and plant the pinks seven inches apart: about the latter end of March I top dress them with some old rotten horse-dung worked into the mould with a small fork between each plant: in the beginning of May they will spindle up for bloom, I then take off all the side shoots that show for bloom, not leaving more than two of the main stems to bloom, and in many cases not more than one, and also all the side shoots that show for bloom, leaving only the main pod to bloom: about the latter end of the month many of the pods will begin to open, care must then be taken to keep the pods from bursting, to prevent which, they should be tied with a piece of soft bass matting round the middle of the pod in a tight knot; and should they be inclined to run down on one side, they should be eased on the opposite side down to the bass, which will give freedom to the petals to expand equally; and when they begin to drop their guard leaves, cards should be placed on them, laying the guard leaves even and round to allow the others to fall in regular succession, then the shade should be placed over them from the sun."

The following mode of treatment is given us by one of the most successful northern florists:—

"The compost of the beds should be composed of fresh loamy soil, mixed with an equal proportion of cow-dung, which should be two years old. These materials must be well incorporated together by frequent digging. The beds in which blooming plants are to be grown, should be some little higher than the surrounding surface, and the surface of the bed must be formed so as to have it convex, in order to throw off any excess of wet, which, if not guarded against, would be particularly injurious.

"I plant off my pinks for blooming in September, for pinks transplanted in spring never do well, nor show half the beauty which those do that are planted in September; the laced pinks, in particular, appear almost plain, without their distinguishing character. In order to have strong vigorous blossoms, I raise fresh plants from pipings every season, as they bloom the best when one year old.

"I have often noticed in the plan of striking pipings which is generally adopted, a very great failure to attend the practice; in numerous cases not more than one in twenty strike root. The usual method is to make a slight hotbed, and cover it either with a frame or hand-glass; the pipings being inserted, are accommodated with dung-bed heat; this is quite opposed to their striking, for at this period it is indispensably necessary to a successful striking that they be kept quite cold. In the mode I practise, ninety-nine will usually strike out of every hundred.

"My piping season is from the middle of June to the first of July,—that is, when the plants are in bloom; for if later, the shoots get too long for successfully striking root. I find it best to take them off when about two inches long, and plants raised from such pipings make a far more vigorous growth that those which are struck from older pipings. The mode I pursue in striking is as follows:—I select a shady situation in the garden; having dug the soil over, I then with water make it a complete puddle. Having taken off the pipings, I strip off the two lowest leaves, and then stick the pipings into the puddle, at about three inches apart. Having done this, I place a hand-glass over them; I do not water them on insertion, for if this were done, the pipings would be very liable to damp off. The hand-glass is not removed till I perceive the pipings have begun to push shoots; this is generally in about three weeks; I then take it off for about half an hour each day for the first week, thus gradually exposing them to the air. By the above mode of striking, for the last four years I have not lost one dozen of pipings.

"In order to grow pinks producing the finest and best flowers, it is indispensible to make a new bed every year. I uniformly grow the most esteemed varieties in beds prepared as above, where

"Varied beauties shine upon her face;
Where all is beauty, harmony, and grace."

"The properties of a good pink are, the flower must be two inches upwards across, broad petals, of pure white, quite distinct from the eye, unless the flower be a laced pink, in which the colour of the eye must go round the edge of the petals, and be free from any tinge or spot; the colour of the eye and edge should consist of a bright, or dark rich crimson, resembling velvet, the darker the colour, the more to be valued.

"When the weather is hot, I find it necessary to shade the flowers. This is done by placing small boards over them. The boards are five inches broad, and about half an inch thick, each fixed upon a stick that supports it above the flowers—for

"Touch'd by the sun, the lustre fades
And weeps itself away."

"Early in May, I commence watering with liquid manure."

The following standard of form for the pink was forwarded to us by Florista, as being that agreed upon by southern florists:—"That the flower should be circular, and rise like half a ball; the petals should be thick, broad, smooth at the edges without notch or serrature; they should be regularly disposed, and each row be smaller than that next under it; the ground should be pure white. The colour, whatever it may be, should reach from the inside of the petal, far enough outwards to show in front beyond the petal above it, and form a rich eye; and a narrow even lacing or stripe of the colour should appear inside the white edge, which should be just the same width outside the lacing as the lacing is, and as even. There should be no break or vacancy in the lacing, and the colour inside of the petal, as well as the lacing, ought to be well defined, forming a circular coloured eye or centre to each row of petals." Our respected friend Florista, who is an amateur grower, resident in a midland county, observes,—"The northern florists do not accede to this standard, as they consider all 'pinks not thoroughly laced *to the edge of each petal* useless, and such are invariably discarded from their shows, as possessing a fatal defect, termed feather-edged. I must candidly admit, that several of the northern varieties have pre-eminence in shape of petal, and regularity and boldness of lacing, over the southern ones, being large, fine, and well-shaped, with edges free from notch or serrature, and regularly laced, and had besides beautiful centres or eyes."

I do not wish to be understood that I am commending the northern flowers beyond their merits; yet I cannot bring myself to confess that *two or three* tiers of petals constitute a *double* flower; but I must admit, that if they were possessed of more petals, they would be all a florist could desire a pink to be.

We applied to Messrs. Ward and Normans, of Woolwich, for the blooms they exhibited this season at the London shows; all their flowers were *double*, and though fully so, the greater part of them had centres free from any confusion, and arranged with regularity. These stands comprised both southern and northern varieties.

# ARTICLE II.

## REMARKS ON THE LILAC.

BY FLORA.

> The lilac, various in array, now white,
> Now sanguine, and her beauteous head now set
> With purple spikes pyramidal, as if
> Studious of ornament, yet unresolved
> Which hue she most approved, she chose them all."
>
> COWPER.

THE delightful sensation which the lovely tints of this elegant flower, and its fragrance, produce on us in the month of May, has been compared to the first emotions of love, for nature seems to have ordained that mortals should not be permitted to see the one or feel the other with indifference; for who can behold the flexible and modest, yet dignified clusters of this charming flower, whose colours vary at every movement, and so sweetly descend from the finest violet down to the silvery white, without regretting the short duration of so divine a gift.

Perhaps we have no flower that gives, or an imagination strong enough to conceive, greater harmony than is afforded in the happy gradation of colour from the purple bud to the almost colourless flower of these charming groups, around which the light plays and dissolves itself into a thousand shades, which all blending in the same tint, form that incomparable combination that rivets the attention of the most indifferent observer, and throws the painter into despair. We are told Spændonk himself dropped his pencil before a bunch of lilac; for Flora seems to have designed the thyrsi of the lilac to please the artist by their delicacy, and to tantalize him by their varying tints.

The harmony of colours is so complete in the lilac, that when we place a bunch of the white flowers on a branch of the purple variety, an offensive harshness is instantly observed; nor will the more delicate green of the first kind assimilate with the purple tyrus of the latter, without displeasing the eye.

In the floral language of the east, where this flowering shrub is a native, and where spontaneously

> ——" the lilac hangs to view
> Its bursting gems in clusters blue,"

they have made it an emblem of the forsaken, because it is the flower that lovers offer the fairer sex when they quit them; but in this climate, where the charm of the fair is as powerful as this flower is agreeable, the swain is often kept in fear of receiving the lilac.

However ungallant the Persian beaux may be in giving the lilac, they are not deficient in complimenting the fair in their language, as their expression for a fine woman and a beautiful flower is the same. Lilac, or lilag, is a Persian word, which simply signifies a flower, but which Europe has given to the shrub it has taken from the ancient Elamites; and from the flower we have given name to one of our most delicate compound colours.

That a plant of the tropical climes should be so hardy as to stand the severest winters of the greater part of Europe is admirable in the lilac. Its easy propagation, and speedy growth, are no less conspicuous than its beauty, and which have contributed to its rapid distribution throughout not only the temperate but even some of the colder parts of Europe; for it has naturalized itself in Scotland and in the mountains of Switzerland, and it is now found in the forests of Germany, although it was unknown in this quarter of the globe before the year 1562, when Angerius de Busbeke obtained it from the east, and transported it from Constantinople to Vienna, whence he had been sent ambassador from the Emperor Ferdinand I. to the Sultan Soliman.

The generic name of this plant, Syringa, is derived from the Greek Συρινξ, a pipe, because when the pith is taken from the wood it formed pipes like those which Pan made of the reeds into which the nymph Syrinx was transformed.

———" 'Thou,' he said,
'Who canst not be the partner of my bed,
At least shall be the consort of my mind,
And often, often to my lips be join'd.'
He form'd the reeds, proportion'd as they are,
Unequal in their length, and wax'd with care,
They still retain the name of his ungrateful fair."
Ovid.

Hence as syrinx and syringa meant a pipe, the lilac was called the Pipe-tree when first known in England; and under that name Parkinson writes of it in 1640, and Roy in 1665. Although Gerard says, in 1597, "The later phisitions do name the blewpipe-tree

Lillach, or Lilac, and some Syringa." This author tells us, that the lilacs were then growing in his garden in very great plenty, where they flowered in April and May: and he adds, "But as yet they haue not borne any fruite in my garden, though in Italie and Spaine their fruite is ripe in September;" from which we learn it was then common in Europe; but we have no means of ascertaining by whom and in what year it was introduced into England. However, as it reached Germany in the second year of Queen Elizabeth's reign, it is probable that plants were soon afterwards sent to her gardener; as we find by the survey of the royal gardens of Nonsuch, in Surrey, which were planted in the time of Henry the Eighth, and were one of the favourite residences of Elizabeth, that in the privy-gardens of that palace there were fountains and basins of marble, one of which was "set round with six lilac trees, which bear no fruit, but only a very pleasant smell." This survey was made in the time of Charles the Second, who gave the palace and gardens of Nonsuch to one of his mistresses, who pulled it down and sold the materials.

Gerard considered the lilac to be a species of privet; later writers took it for a kind of jasmine; and M. Jussieu, in his "Natural Classification of Plants," also makes it one of the jasmine family.

In the shrubbery the lilac is amongst the first that announce the return of spring; and no flowering tree makes known the welcome tidings in a more pleasing garb, for the beauty of its foliage, and particularly that of the white variety, is scarcely less agreeable than its girandoles of flowers, that shed their perfume so delightfully over our May-day walks.

The praise which Eudosia bestowed on the swan, we may safely borrow for the white lilac, as it is equally an

"Emblem of modest grace,
Of unaffected dignity and ease,
Of pure and elegant simplicity."

Many persons complain of the lilac for shedding its flowers so early, without taking into consideration at what an acceptable period the blossoms appear, and that it lends its beauties, with those of the laburnum, to fill up the space between the flowering of the almond and the arrival of the rose, which leaves us nothing to regret.

The most beautiful variety of the common purple lilac is that known by the title of the Scotch lilac, from its having been first mentioned in the catalogue of the Edinburgh garden. The flowers of this kind are of a much richer colour than those of the blue lilac, the buds and under side of the petals being of a hue between purple and carmine, that gives a kind of ripeness to the appearance of the clusters, which are produced in larger groups, and with larger flowers also, than any other lilac. This kind likewise gives out its blossoms about fourteen days later than the common lilac, which lengthens the season of these flowers very considerably. The Scotch lilac is succeeded by the Persian lilac, which continues in blossom until the end of June, thus decorating our plantations from eight to ten weeks with the most agreeable attire.

During the last year we enjoyed the forced lilacs from the beginning of February until those of the open garden appeared, which pleasure was lengthened by our meeting with them in full perfection at Paris in the months of August and September, where

> Le lilas qui pend, avec grace,
> Offre ses bouquets ingénus,

at a season we have not yet met with them in this country, although we have equal means with the French of retarding the time of their flowering.

The art of retarding the ripening of fruits, and the flowering of plants, is scarcely less desirable than that of forcing them, for by this means we join, as it were, the two ends of the year.

The common lilac grows to the height of eighteen or twenty feet, when planted in a rich light soil; therefore it should hold a middle rank in the plantation. And we have already noticed how charmingly it contrasts with the laburnum and the guelder rose; the purple variety being placed with the snow ball, and the white lilac advancing its pale leaves before the cypress, the bay tree, or other dark evergreens; whilst the blue Persian lilac may spread its more humble, but not less graceful branches, in the foreground of its white relative. The Persian lilac seldom exceeds five or six feet in height in the most favourable situations; therefore it should only be placed in front of the shrubbery clumps or plantations. It often spreads to a considerable extent, and covers its whole mass with its loose branches of delicate flowers, which are of a more agreeable, though less powerful odour, than those of the common lilac. We have seen large bushes of the common privet-leaved lilac growing on lawns, bending their slender branches to the turf every way, and forming a mount of blossoms, arising from the green sward, that could leave the most voluptuous florist nothing to wish. Of the Persian lilacs, the variety with cut or pinnatified leaves was the first introduced, which Parkinson tells us, in 1640, was then growing in the garden of Master Tradescant, at South Lambeth. It is noticed also by Parkinson, in his "Garden of Pleasant Flowers," of 1629, but he there states that it was a stranger to England, and that he described it from foreign accounts, with a hope that some one might be induced to bring it to this country. It is, therefore, clear, that its first introduction was between these two dates. It was formerly called the Persian jasmine by our nurserymen, although it was first introduced into Europe with the Persian name of Agem. It is generally supposed that the white Persian lilac is only an accidental variety, either raised from seed, or produced from suckers of the blue sort.

The Chinese lilac was first brought to this country in 1795. It is of a middle stature, between the Persian and the common lilac, and its leaves smaller than the common kind, with branches that are generally better furnished with blossoms, and that are both larger and deeper coloured than those of the Persian lilac.

The lilac should never have its branches shortened, as the flowers are always produced at the ends of the shoots of the former year, and just below the girandole of flowers other shoots come out to succeed them, and contribute much to the beauty of the flower. The part on which the flower stands, decays down to the young shoots every winter. Thus nature prunes the lilac, but the trees of the common lilac are greatly improved, by attention in keeping the stem free from suckers, as it will always be observed, that those plants which are so trained, produce the finest and most abundant flowers, and on this account, the plants that are raised from seeds are much to be preferred, as they are not so apt to abound in suckers. If the seeds be sown as soon as ripe, they come up the following spring, and generally flower the third or fourth year from seed, which is earlier than those that are taken from suckers. As the Persian lilac seldom ripens its seed with us, it is usually propagated by suckers, but it is more desirable to multiply the tree by laying down the young branches, which in one year will be sufficiently rooted to transplant.

We cannot close our account of the lilac without observing that it is amongst those trees that retain their verdure the longest; and as it cannot be too familiar with us, it is to be hoped that we shall see it creep into our hedge rows, and sometimes border our woodland scenes.

## ARTICLE III.

### REMARKS ON, WHAT IS A FLAMED TULIP?

BY MR. JOHN SLATER, FLORIST, CHAPEL WALK, CHEETHAM HILL, MANCHESTER.

I AM induced to forward for insertion in the FLORICULTURAL CABINET the following observations on, what is a flamed Tulip, in consequence of what took place at the York Tulip meeting:—

In the York Tulip schedule flamed varieties were mentioned, and sums of money attached to them as prizes, and being a judge upon that occasion, I very naturally refused to judge, as flamed flowers, those which the committee had selected as such, in consequence of their not having had a beam up the centre. An umpire was called in to decide the dispute, and the decision was given against me, for this reason, viz., because the flowers had the mother or breeder colour in them. In answer to what is a flamed Tulip? I will quote the opinion of Mr. Groom, given in the "Florist's Journal," for July, 1840. In page 57, line 15th from the top, after describing a feathered Tulip, he proceeds thus:—"Next to this comes the flamed flower, which should have, besides the feather, a rich beam up the rib of each of the petals, branching off on either side, and the points meeting the feather; at the same time preserving a sufficiency of the ground colour between the flaming to display it to the greatest advantage." In this description of a flamed Tulip I perfectly agree; for what constitutes a flamed Tulip except the beam? and the cause of the beam is this:—The Tulip in breaking from the breeder leaves a portion of the mother or breeder colour, which runs up the centre of the petal, and then strikes off with the real colour to the feathering; but why this is so is a mystery which we cannot unravel. It is so, however, and we can only surmise. To say it is an imperfect break would not do, as the majority of the finest Tulips are what are termed flamed ones; and if, on that account, they are disqualified, there will only remain a few of what are termed first-rate varieties. What is Salvator Rosa? a flamed variety. Would you disqualify one of the finest Tulips in cultivation on account of the beam, or the mother colour, whichever you may be pleased to term it? What are Pandora, Thalia, Reine de Sheba *alias* Mentor, Ponceau très blanc *alias* Madame Catalina, Aglaia, Bijou des Amateurs, Bacchus, Cerise à belle Forme, Donzelli, Marcellus, Iago, Holmes's King, Polyphemus, *Camarine, &c.? Further*, what says the Editor of the "Florist's and Amateur's Annual?" In his properties of the Tulip he divides them into six parts, and in his sixth section of the properties, he comes to the marking, and he thus writes:—"The marking of the petals regular and uniform, whether it be a broad or narrow feather round the edges of the petals which are exposed, or a flame up the centre, and branching off, and though very rarely uniform in this respect, the nearer approach the better. So much in regard to the properties for showing." But the writer must have forgot this published opinion, when so lately as the 29th of June he says, "No flower can be good for show if it has the breeder colour in it;" and on the 6th July he says, "A Tulip should not have any of the breeder colour in it." I can only account for this on the following grounds, namely:—The question has not been fairly stated to him. If it was a feathered variety, and had breeder colour in it, I agree with him that it ought to disqualify a pan, providing the other pan or pans have not the same glaring fault. There has never been but one instance, I believe, of the beam and feathering being of the same colour; but I must admit that the nearer the approach to the colour of the feathering so much the better. A Tulip in the north, if the beam is very pale, is not considered of so much value as one very dark. Aglaia, although a pretty variety, is very defective in the beam. In some instances it is uncommonly pale, and at other times the colour is tolerable. The same may be said of many others. If the taste of the York florists is correct, then it will be a mere mockery to offer prizes for flamed Tulips, if those only which are what are termed, and correctly so, neither feathered nor flamed, are to be classed as such. I have a work before me upwards of 100 years old, written by the celebrated Dutch florist, Nicholas Van Kampen, and the properties he lays down are in accordance with what has been previously expressed. The authorities quoted, however, are sufficient to satisfy any Tulip-grower, they being, as they are, the opinions of the best florists in the country; and I trust that the properties already alluded to will, for the future, form the standard of a flamed Tulip, being persuaded that they are strictly in accordance with the opinions of all England, excepting within a circuit of about thirty or forty miles round York. I must, in justice to Leeds, Wakefield, Halifax, and their neighbourhood, say, that their opinion is in accordance with the general one, and all flamed flowers are judged according to Mr. Groom's standard.

# ARTICLE IV.

## REMARKS ON HYBRIDIZING PLANTS.

### BY AN AMATEUR FLORIST.

I HAVE noticed in the CABINET, from time to time, remarks by the Conductor on encouraging the hybridizing of various classes of plants, and which induced me to turn my attention to the process last season with the Amaryllis, Achimenes, Verbena, Fuchsia, Phlox, Pelargonium, and others. Some of the seeds I obtained early last summer I sowed immediately, and the others early this spring, and now I have, as the result, very numerous, and in almost endless variety, beautifully distinct flowers of the above, with the exception of the Amaryllis. The process is easy,—applying the pollen of one flower to the stigma of another. The flower to which the pollen is about to be applied must have its own anthers (containing the pollen) cut away before they burst, after which, the pollen, from the different plant, may be applied to the stigma. If the pollen of the plant to be operated upon is not cut away, the stigma is likely to be operated upon by the pollen of the same flower, and the result be natural seedlings. The stigma, when in a proper state to have the pollen (powder-like) applied, is glutinous outside, and the powder adheres to it. I have noticed that no certain criterion can be relied on as to the form the new plant will take, sometimes I find that the male (pollen) plant is assumed, and in others the contrary. I uniformly found that the more perfect in form both parents were, so was the production, as it respects the colours. I have not had two alike from the same plant; when all the flowers on a plant have been operated upon, by pollen, from one plant, the most decided, strong, and clear colours, give the more distinct in the progeny. It is only by observation, in the progress of the operation and blooming, that the best results can be safely expected in future attempts as to colours, but in form, where the flowers of both are of fine form, those raised therefrom will certainly be good. As far as the majority of my one year's experiments go, I find, *in colour*, the seedlings partake more of the mother plant; and, *in form*, that of the plant from which the pollen was brought.

The entire process, from first to last, has afforded me much gratification, and those persons fond of flowers will derive pleasure in its pursuit. The results of but a few years application to the system of hybridizing has already added immense charms to the beauties of the stove-greenhouse and flower garden, as well as to fruits, and the process being now carried on in a far more extensive scale, in a few years we shall, no doubt, have quite astonishing results to grace our floral exhibitions, as well as domestic compartments.

I recollect noticing some very strong *objections* to the process of raising hybrid plants being inserted in a publication conducted by the Editor of the Chronicle Newspaper, but, on a recent occasion, I saw in that paper the very opposite is now taken, and it is as highly applauded, so that the condemnation formerly given on florists for their floral productions now attaches to another class, and *practice* has triumped over theory, and the foolish customs of by gone days.

## ARTICLE V.

### REMARKS ON THE LIME, OR LINDEN TREE.

BY FLORA.

—— " And the lime at dewy eve
Diffusing odours." COWPER.

FASHION reigns over the toilet not with more arbitrary power than she governs the trees of the pleasure garden. She even enters the forest, declaring war against and levelling to the earth all such as are not in favour with her court; and as Caprice generally holds the situation of prime minister to this tyrannical goddess, it is not surprising that Folly should so often be employed as first marshal. Reason, who is deemed a traitor by this government, finds his opposition too weak to oppose such a phalanx, and sees the lofty tree and the lowly shrub alike rooted from our native woods, their antiquity and utility no more availing themselves, than their beauty or singularity influences the whimsical disposition of Fashion, who is thought to be a spurious daughter of Taste. In vain did the lime fill the sighing breezes with delightful odours,—in vain were its agreeable shade and pretty umbels offered as a ransom to appease Fashion, offended by the litter of its early falling foliage; her influence was too great, and the lime bowed its noble head to the axe of Folly, leaving its thinly scattered offspring to the protection of Obscurity, until Reason return to resume his administration. Monsieur Louis Liger remarks, in 1703, that the lime, or linden-tree, was then gone out of fashion in the French plantations, being supplanted in favour by the hornbeam and the elm. But our celebrated nurserymen, London and Wise, tell us, in 1706, that it was then more in use in England than any other tree " for standards and espaliers, having found the inconvenience of planting elms near the fruit trees, or good plants; because the roots of the elm impoverish all the ground where they grow." It is a fine tree for the pleasure garden, which induces me to offer remarks upon it, and it well deserves to be in every one.

This tree is the Φίλυρα (*philyra*) of the Greek writers, and the *Tilia* of the Latin authors. It is thought that the Greeks named it *Philyra*, because the inner bark formed thin sheets on which they anciently wrote, instead of parchment or paper. The Latin name is supposed to be derived from τίλον, which signifies a feather, because the flowers of this tree are produced from a kind of tongue, called the bractes, which very much resembles a feather. The Italians follow the Latin name *Tilia*, from which also the Spanish *Teia*, and the French *Tilleul*, seem derived.

The English title seems to be a corruption of the Dutch *Linde* or *Lindenboom*, or the German *Linden* or *Lindenbaum*, as all our early writers call it Line, or Linden-tree; and as we have now one species of the citrus-tree called Lime, it would be desirable to resume the ancient name of this tree, and call it Linden, to avoid confusing the two.

The linden is a native of Europe, and, according to Thunberg, of Japan also. Mr. Aiton makes it a native of this country; but it is hardly to be supposed that the able compiler of the Hortus Kewensis could possibly follow back the register of each individual plant with the scrutiny of a poursuivant at arms.

We find no English name for this tree but what is evidently borrowed from the Germans, and our earliest writers mention it as a rare tree.

Dr. Turner tells us, in 1568, "it groweth very plenteously in Essekes, in a parke within two mile from Colichester, in the possession of one Master Bogges; it is also very common in high Germany." Gerard observes, in 1597, "that the female linden-tree groweth in some woods in Northamptonshire; also neere Colchester, and in many places along the highway leading from London to Heningham in the county of Essex. The male linden-tree groweth in my Lord Treasurer's garden in the Strand, and in sundry other places, as at Barnelmes, and in a gardain at Sainte Katharine's, neere London."

Parkinson says, in 1640, "the female linden-tree is planted in many places in our land, chiefly for the large sweet shadow it maketh; the others are very great strangers in this land, scarce to be seen any where."

Evelyn complains, and says, "it is a shameful negligence that we are not better provided of nurseries of a tree so choice and universally acceptable." He tells us, that "the young trees were then sent for from Flanders and Holland, to our great cost, although they were to be found in some of our woods."

Excepting the torrid zone there is no part of the globe whose timber-trees do not thrive in this country as well as in their native soil. The famous linden-tree of the duchy of Wirtemberg, which gave to the city of Neustadt the name of *Neustatd-Ander grossen Linden* (the city of the great Linden), although it was of prodigious height and nine feet in diameter, is not to be compared to one in this country, which grew at Depenam, in Norfolk, ten miles from Norwich, which measured near the ground forty-eight feet in circumference, or sixteen feet diameter; and at some distance higher it girthed thirty-six feet, and in the least part of the trunk it measured twenty-five and a half feet, and was to the uppermost branch, ninety feet in height. (The measurement of this tree was sent to Evelyn by Sir Thomas Brown, of Norwich.)

Switzerland is celebrated by Evelyn for its enormous linden-trees, many of which remain sacred to this day. He particularises the famous linden at Zurich; as also one at Schalouse, under which was a bower composed of its branches, capable of containing 300 persons sitting at ease, and so thick was the foliage that the sun never penetrated.

[*To be continued.*]

# PART II.

## LIST OF NEW AND RARE PLANTS.

Acacia autriformis. Coulter-shaped leaved. (Pax. Mag. Bot.) Leguminosæ. Polygamia Monæcia. In the spring season the greenhouse Acacias and Mimosas are the prettiest ornaments, laden, as they usually are, with a profuse mass of globular heads of golden flowers. The light, airy, and elegant appearance of the plants, especially when in bloom, is such, that they merit a place in every greenhouse. The present species is a native of New Holland, and has been in this country some few years. It is a very handsome flowering plant, and can be procured at most of the Nursery establishments at a trifling cost.

Andromeda phylliræfolia. Phillyrea-leaved Andromeda. (Bot. Reg. 36.) Ericaceæ. Decandria Monogynia. A native of West Florida, from whence it was sent by the late Mr. Drummond. It is a neat evergreen shrubby greenhouse plant, and has bloomed in Messrs. Loddiges's collection. It is probable that it will even endure in the open air in the milder parts of this country. It requires peat soil, and a similar treatment to Andromeda floribunda. The flowers are of a snow-white, and hang in rows like pearls on a Negro's neck, in contrast with the very dark green foliage. Each blossom is about half an inch long, about the size of the Irish Heath blossoms.

Begonia Meyerii. Mr. Meyer's Begonia. (Bot. Mag. 4100.) Begoniaceæ. Monæcia Polyandria. Native country unknown. It has been sent from the Berlin Garden to this country. It is a tall growing, stove species. Leaves large, ovate, of a pale green, slightly tinged with red. Flowers white, produced numerously in large panicles.

Calanthe Masuca. Lilac Calanthe. (Bot. Reg. 37.) Orchidaceæ. Gynandria Monandria. A native of Nepal, in the collection of Messrs. Rollison's, of Tooting. Sepals lilac inside, white outside. Petals lilac. Labellum violet-purple. Each blossom is about two inches and a half across.

Ceanothus thyrsiflorus. Thyrse-flowering. (Bot. Reg. 38.) Rhamnaceæ. Pentandria Monogynia. Seeds of it have been sent to the London Horticultural Society by R. B. Hinds, Esq., who discovered it at San Francisco and Monterey: also found in California. The Horticultural Society have distributed it liberally, under the name of C. divaricatus, but it proves to be C. thyrsiflorus. It is a perfectly hardy shrub, with evergreen foliage of a glossy green, and produces numerous dense panicles of bright blue flowers. The plants we have seen in bloom have a very beautiful appearance. It deserves to be in every shrubbery, or trained against an ornamental wall, trellis, &c. It grows rapidly, and soon makes a cover.

Clitoria fulgens. Bright-flowered. (Box. Mag. Bot.) Leguminosæ. Diadelphia Decandria. It is a native of the Organ Mountains of Brazil, seeds of it were sent to Messrs. Veitch's, of Exeter, who exhibited a plant in bloom at the May show in the Chiswick gardens. It is a hot-house, twining, evergreen sub-shrub. The flowers are produced from the axils of the leaves in clustered heads, on a wiry stem about six inches long. Each blossom, pea-formed, is about an inch long, and the same across, of a rich crimson-red colour. The plant appears to bloom freely, and is well deserving a place wherever practicable.

Cummingia trimaculata. Three-spotted flowered. (Pax. Mag. Bot.) Liliaceæ. Hexandria Monogynia. A native of Chili. The flower-stalk grows about a foot high, and is crowned with a loose and spreading panicle of pretty, pendulous, bell-shaped blossoms, attached to short pedicels. Each blossom is nearly two inches across, of a rich blue colour, with a circle of white, and another of black near the centre. It is a very interesting and pretty flowering plant.

Æonium Youngianum. Mr. Young's Houseleek. (Bot. Reg. 35.) Crossuleaceæ. Dodecandria Dodecagynia. A native of the Canary Islands. The leaves are large, fleshy. The flowers are produced numerously in large panicles. Each blossom is about an inch across, yellow.

*Eriostemum buxifolium.* Box-leaved. (Bot. Mag. 4101.) Rutaceæ. *Decandria Monogynia.* A native of New Holland, a handsome greenhouse shrubby plant. The foliage is in the way of Pimelea decussata. The flowers are produced numerously for several inches at the extremities of the shoots. Each blossom is about an inch across, flesh-coloured, with a pale-blue tinge down the middle of each petal. It deserves a place in every greenhouse.

Lælia pedunculata. The Pedunculated. (Bot. Mag. 4099.) Orchidaceæ. Gynandria Monandria. A native of Guatemala, sent by Mr. Skinner to Woburn. The flower-stem rises about a foot high. Sepals and petals of a pretty lilac. Labellum lilac, lip with a yellow stripe, and centre dark crimson. Each blossom is about two inches across.

Odontoglossum læve. Smooth-lipped. (Bot. Reg. 39.) Orchidaceæ. Gynandria Monogynia. A native of Guatemala. The flowers are produced in a long panicle. Each blossom is about an inch and a half across. Sepals and petals orange yellow, blotched and striped with crimson. Labellum lilac-purple, with a white lip. The sepals and petals are green at the underside, spotted with pale brown.

Tropæolum Lobbianum. Mr. Lobb's. (Bot. Mag. 4097.) Tropæoleæ, Octandria Monogyuia. Discovered in Columbia, and sent to Messrs. Veitch's, of Exeter, by their collector. It makes a charming appearance when trained to a frame-work, as is done with T. tricolorum, and others. The leaves are similar to the common border Nasturtium. The flowers are of fine flamed orange-red, the lower petals fringed beautifully. Each blossom is a little more than an inch across, and near two inches long to the tip of the spur. It is a very pretty addition to the lovely tribe.

## New Plants seen at Nurseries, &c.

### *At the Royal Gardens, Kew.*

Franciscea hydrangeaformis. For the first time in this country it is in bloom here. The flowers are about the size and colour of F. uniflora, but are closely arranged in heads, similar to the Hydrangea. The plant grows vigorously, the leaves are large, and the flowers fragrant. We remarked on the plant, in a previous number, as being in the collection of Mr. Low's of Clapton. It is a fine species, well deserving a place in every collection.

Thunbergia chrysops. All the Thunbergias are beautiful, but this eclipses all others yet known in this country. The flowers are produced singly from the axils of the leaves, have a long tube, narrow at the bottom, gradually widening to half an inch broad at the mouth, and the limb (face of the flower) spreads large. The inside of the tube is yellow, very visible, next a ring of fine pale blue, and the rest part a rich violet. It is an abundant bloomer, and one of the handsomest plants introduced into this country for some years.

### *At Messrs. Hendersons'.*

Gloxinia discolor. The stem grows about nine inches high, and terminates in a large tuft of flowers, which are produced on footstalks, four inches long, about forty flowers in a head. They are of a lilac-blue, becoming white nearly at the centre. The leaves are remarkable too; they are very large, having strong yellowish veins. The ground-colour of the upper surface is a dark green, whilst the underside is of a deep blood colour. It deserves a place in every warm greenhouse.

### *At Messrs. Rollissons', Tooting.*

Aerides maculosum. It approaches nearly to A. Brooki. The sepals and petals are beautifully spotted with purple on a light ground, and the tip is of a similar ground, having a large blotch of purple on the lip. The flowers have a very delicious fragrance.

I is a Bombay orchideous plant, well deserving a place in every collection.

### PLANTS NOTICED IN BOTANICAL REGISTER NOT FIGURED.

**FRITTILLARIA KOTSCHYANA.**—Discovered near Mount Elburz, and sent to the Dean of Manchester by M. Kotschy. The flowers green and purple, with yellow anthers.

**HYMENOCALLIS BISTUBATA.**—Discovered by Mr. Hartweg, but uncertain where. It has bloomed in the collection of the Dean of Manchester at Spofforth.

**DENDROBIUM CHLOROPS.**—From Bombay, and has lately bloomed at Messrs. Loddiges. The flowers are of a pale nankin colour, having the base of the lip of a pea-green colour.

**CATASETUM OCHRACEUM.**—From Bogota, sent by Mr. Hartweg to the London Horticultural Society. The flowers are of a deep yellow-ochre colour, it is much in the way of C. luridum.

**BOLBOPHYLLUM CHEIRI.**—From Manilla, and has just bloomed at Messrs. Loddiges. The flowers are of a clear green colour, with brown stripes. Each blossom is about an inch and a half long.

**VANDA PARVIFLORA.**—From Bombay, and has bloomed at Messrs. Loddiges. The flowers are small, ochre-coloured, having the lip sprinkled with purple spots.

**SPATHOGLOTTIS PLICATA.**—From Penang. It has bloomed with Messrs. Loddiges. The flowers are of a light purple.

**ANEMONE GOVANIANA.**—A pretty Alpine plant from Nepal, and which has bloomed in the garden of the London Horticultural Society. The flowers are white, having yellow anthers. It is a hardy herbaceous plant.

**EPIDENDRUM HANBURII.**—Received from Mexico by R. Hanbury, Esq., of Stamford Hill. The sepals and petals are purple, the lip rose with crimson veins.

**PHYSURUS PICTUS.**—From Brazil. It has bloomed with Messrs. Loddiges. The flowers are small, white, and have a streak of dark brown down the middle of each sepal and petal.

# PART III.

## MISCELLANEOUS INTELLIGENCE.

### QUERY.

**ON HEATING A GREENHOUSE.**—As an old subscriber to your FLORICULTURAL CABINET, I should feel obliged by your informing me the best mode to be adopted for warming a greenhouse of the dimensions of 23 feet by 13 feet during the winter season, as I am about erecting a house, and feel a difficulty what course to adopt, especially after having read in your July number the objections against tank heating, that being the mode I had intended adopting. I do not keep a regular gardener, only an occasional one, therefore wish to adopt that plan that will answer the purpose best, and I am quite a novice as to which would be best, there being so many various opinions. Your noticing this in your next number will oblige,

Blackheath-terrace, July 6, 1844. A SUBURBAN NOVICE.

[We have seen the tank system in operation in various forms, and the persons who had the management of them reported to us their opinions; and for greenhouses we are confident the best plan our correspondent can adopt is to have what is termed hot-water-pipe heating, by which a most beneficial *dry temperature* can be maintained; and in order to have a desired *moist temperature* at certain seasons, a gutter, running entire the length of the piping, or at intervals, a yard or so of it, being either originally cast with the pipe or one affixed thereto, formed of zinc, lead, tin, or other material, in which water is poured occasionally: the evaporation of moisture may be obtained to any desired degree or period. The cost of this mode of heating is not much more than the tank system for a greenhouse, and the excess of moisture therein in winter is obviated. Any other particulars our correspondent requires, and we can furnish, shall be done with pleasure.—CONDUCTOR.]

## REMARKS.

## LONDON HORTICULURAL SOCIETY'S SHOW.

THE last Exhibition of the season in the Gardens at Chiswick took place on Saturday, July 13th.

The large collection of orchidaceous plants sent by Mr. Mylam, gardener to S. Rucker, Esq., obtained the first Prize, Gold Medal; it contained many noble specimens in the highest health. Among them were Stanhopea tigrina and cinnamonea, producing their singular flowers beneath the bottom of a wire basket; the curious plant producing a yellow Maxillaria-like flower spotted with brown, called Scuticaria Steelii: the rare Anguloa Clowesii, producing a pale-yellow, or rather lemon-coloured flower; and a noble plant of Miltonia spectabilis, with 15 lovely blooms, a very fine plant of Oncidium Lanceanum; O. luridum guttatum, leucochilum, and pictum; Zygopetalum crinitum cœruleum, Sarcanthus rostratus, Cynoches maculatum, Brassia Lawrenceana, and Lanceana; Angræcum bilobum, Cycnoches ventricosum, Lycaste Skinneri and macrophylla, Cynoches chlorochilon, with pale-green flowers; Odontoglossum pulchellum, Catasetum citrinum and luridum, Huntleya violacea, Maxillaria Warreana and vitellina, Epidendrum fragrans, Galeandra Bauerii, Maxillaria stapelioides, and a species with very rich flowers called M. tetragona. Cirrhæa picta, tristis, and Warreana, with very curious flowers hanging over the side of the pots, and which would have been better shown had they had a sheet of white paper placed beneath them; a pretty specimen of the beautiful Stanhopea saccata.—Second Prize to Messrs. Rollisson, of Tooting. Among them were a fine variety of Calanthe, with rich violet flowers, called C. masuca: a new species or rather variety of Cymbidium, with large dark-brown flowers resembling C. aloifolium; Catasetum deltoideum, with very pretty dark-brown flowers; Stanhopea tigrina, and Wardii; Oncidium Lanceanum; Aerides quinquevulnerum, Miltonia spectabilis, Cattleya crispa; Acropera Loddigesii, Cycnoches Loddigesii, Epidendrum alatum, Lycaste tetragona, Isochilus linearis, Aspasia lunata, Rodriguezia recurva, Brassia Lanceana, and Oncidium luridum.—Third Prize to Mr. Robertson, gardener to Mrs. Lawrence. A magnificent plant of Peristeria alata, the Panama Dove plant; Stanhopea eburnea, oculata, quadricornis; Xylobium squalens; the singular Mormodes citrinum, with yellow flowers; Acropera Loddigesii, Maxillaria Deppii, M. stapelioides, M. tetragona, Mormodes aromaticum, Galeandra Baueri, Epidendrum vitellinum, Brassia brachiata, Catasetum Russellianum, Phaius albidus. Epidendrum odoratissimum. —Fourth Prize to Mr. Redding, gardener to Mrs. Marryat. Stanhopea oculata, with six spikes of bloom; S. grandiflora and tigrina; Epidendrum variegatum, Brassia Lanceana, Gongora nigrita, with very dark flowers; Oncidium papilio, altissimum, and pulvinatum.

*Single Specimens of Orchidaceæ.*—Cattleya Loddigesii, with nine spikes of bloom, from Messrs. Veitch and Sons, of Exeter; Stanhopea oculata variety, with twenty flowers, from Messrs. Henderson, of Pine-apple Place. Vanda Roxburghi, a small plant, from Mr. Plant, gardener to H. Schroder, Esq., of Brixton; and a new species of Calanthe, with pale-violet flowers, called C. plantaginea, from Mr. Eyles, gardener to Sir George Larpent, at Putney Heath.

*Large Collection of Stove and Greenhouse Plants of Mr. Robertson.*—It contained a fine specimen of Æschynanthus maculatus, upwards of two feet in diameter, trained hemispherically, and liberally covered with bloom; Besleria pulchella, a very pretty plant; Lasiandra petiolata, a plant three feet in diameter, and producing very pretty blue flowers; Phæconoma prolifera, a very fine specimen; Cuphea Melvillai, two large plants producing large scarlet flowers tipped with green; Pentas carnea, a well-bloomed plant; Manettia cordifolia; Statice macrophylla, with a fine spike of bloom; S. sinuata, a neat plant; and a very pretty specimen of Mirbelia ilicifolia.

A remarkably fine plant of Vinca rosea ocellata in perfect bloom; Siphocampylus betulifolius; Achimenes grandiflora, a noble specimen, in most profuse bloom; Angelonia Gardneriana, prettily-spotted purple flowers, in long spikes; Leschenaultia formosa; Asclepias curassavica; Osbeckia chinensis, rose-coloured flowers; Clerodendrum calamitosum; Cassia corymbosa.—Second Prize to Mr. Frazer, of the Lea-bridge-road. A very fine specimen of Kalosanthes coccinea, loaded with its bright-scarlet flowers; a very large plant of Vinca rosea alba; Roella ciliata, an admirable plant, covered with its beautiful pale blueish-purple flowers; Euthales macrophylla, four feet high, covered with beautiful yellow flowers; Angelonia Gardneriana; Crowea saligna, Vinca rosea, and Gardoquia Hookeri; Boronia viminea and Leschenaultia formosa.—Third Prize to Mr. Epps, of the Bower Nursery, Maidstone. Coleonema rubrum, Sollya heterophylla, Clerodendrum squamatum, Achimenes multiflora, Achimenes grandiflora; Brugmansio floribunda, with orange flowers; Gloxinia Cartoni, Begonia parviflora, Torenia scabra, and Vinca rosea and rosea alba. Mr. Bruce had a very admirable specimen of Pentas carnea, said to have been grown in the open air; Achimenes longiflora, Aphelexis humilis, Clerodendrum squamatum, Phymatanthus or Pelargonium tricolor, and Pimelea decussata.

Mr. Jackson, of Kingston, had a collection of Statices, consisting of S. sinuata, a very pretty species; Pseudo-armeria, a variety with pink flowers, said to be hardy; with S. Gmelini mucronata, Dickensoni, arborea and incana. Messrs. Mountjoy, of Ealing, sent twelve very fine plants of Lilium eximium; and Mr. Cuthill, nurseryman, of Camberwell. ten beautifully grown plants of Lisianthus Russellianus, a plant for the successful cultivation of which he has been so long celebrated.

*New Plants.*—By Mr. Robertson, Saurauja spectabilis; the flowers in bunches, resembling Spiræa ariæfolia, but shorter in the bunch, and deliciously sweet-scented.—Chiococca racemosa, by Mr. Eyles, gardener to Sir George Larpent; small yellow flowers, which were abundantly produced.—Mr. Gad. gardener to Thomas Lenox, Esq., of Plaistow, Essex; Brugmansia floribunda,—Messrs. Mountjoy, a plant of Gloxinea cerina, with pale pink flowers, and said to be a half-bred Sinningia.—Mr. Stanley, a species of Thysanotus.—Mr. Frazer, Gompholobium splendens, with yellow flowers.—Mr. Ayres, gardener to James Cook, Esq., sent a plant of a hybrid Achimenes, said to have been raised between A. rosea and coccinea, and called A. Beatoni.—Mr. Miller, of Ramsgate, sent a large plant of Petunia punctata.

*Single Specimens.*—Gloriosa superba, upwards of six feet high, and in splendid bloom. A very curious plant, with pink flowers protruding from all parts of the old wood of the plant, even from the surface of the pot to the extreme point, was sent by Mr. Robertson, and called Medinilla erythrophylla; he had another beautiful and singular plant, called Lemonia spectabilis.—Mr. Frazer, a magnificent specimen of Crowea saligna.—Mr. Hyde, gardener to B. Cotton, Esq., a noble specimen of Lisianthus Russellianus, covered with upwards of *three hundred flower-buds.*—Mr. Bailey, gardener to his Grace the Archbishop of York, two plants of Kalosanthes nitida, and grandiflora miniata; they were three feet high and three feet in diameter.—Statice sinuata, by Mr. Jackson; Achimenes longiflora, remarkably good, by Mr. Bruce; and A. longiflora and grandiflora, superlatively excellent, by Mr. Robertson. Sedum tortuosum, from Mr. Doran; Leschenaultia formosa, from Mr. Poole; Tristania neriifolia, with yellow flowers, by Mr. May, of Woodford; Erica ampullacea, a splendid plant, by Mr. Dawson, of Brixton-hill; E. tricolor superba, by Messrs. Henderson; and E. tricolor elegans radiata, an excellent plant, and eximia, a fine specimen, by Mr. Robertson, who also sent a grand plant, 10 feet high, of Nepenthes distillatoria, the singular Pitcher plant, which was covered with pitchers.

*Collections of Heaths.*—First Prize: Mr. Robertson had fine plants of Parmenteriana rosea, gemmifera, depressa, viridiflora, cerinthoides major, jasminiflora alba, Cavendishii, ampullacea, oblata, ampullacea vittata, Lanuonii, ventricosa rosea, globosa, superba, eximia radiata, tricolor elegans, and inflata alba. —Second Prize: Mr. Jackson, E. ampullacea and a rubra, cerinthoides, Westphalingia, jasminiflora alba, Jacksoni, Massoni, tricolor superba, a seedling; ventricosa, Bothwelliana, purpurea, inflata, princeps, eximia, and gemmifera; E. jubata, 4 feet high and 4 feet through, very fine; a seedling from Shannonii, a good variety; and ampullacea vittata.—Messrs. Fairbairn sent jasminiflora alba, ampullacea, vittata, eximia, cubica major, inflata, Irbyana, Shannoniana, princeps, procumbens, tricolor (Lee's), tricolor elegans, impulsa, sanguinolenta, and Savilliana.—From Mr. Epps, of Maidstone, tricolor, tricolor (Lee's), Savilliana, ventricosa superba, carnea, globosa and rosea, gemmifera, eximia, jubata, jasminiflora alba, inflata, metuliflora bicolor, Templeana, ampullacea, and ampullacea rubra.—Mr. Green, elegans, eximia, Cavendishii, ampullacea, Shannonii, ventricosa superba, viridiflora, metuliflora bicolor, tricolor elegans, inflata, Massonii, ampullacea vittata, Coventryana, parmenteriana rosea, depressa, and jasminoides. —Mr. Bruce sent tricolor elegans, princeps, Irbyana, viridiflora, ampullacea, eximia.

*Roses in Pots.*—By Mr. Dobson, gardener to Mr. Beck. The best were Elise Sauvage, Barbon, General Allard, Queen of the Bourbons, Highclere seedling, resembling Devoniensis, Celimene, and Augustine Mayet.—Messrs. Lane's collection: Psyche, Charles Duval, Elise Sauvage, Fabvier, Mirabile, Comte d'Osmond, Triomphe de Luxembourg, Napoleon, Duc d'Aumale, Emilie Courtier, Princess de Mecklenberg, Cramoisie superieure, Diana Vernon, Proserpine, Taglioni, and Gouda.

*Cut Roses.*—First Prize. Messrs. Paul, of Cheshunt: Charles Duval, Jaune Desprez, Bouquet à Flore, Crested Provence, William Jesse, Lamarque, General Allard, Grain d'Or, Madame Deschoulteres, Celimene, Amiable Queen, Icheymaker, Nannette, Acidalie, Emilie Courtier, Félicité perpétuel, Edward Jesse, Eugene Beauharnois, Josephine Malton, Aubernoir, African Black, Duchess of Sutherland, Mrs. Bosanquet, Charles Sir, Niphets, a splendid kind; Madame Nerard, Louis Buonaparte, Miss Elliott, Devoniensis, Perpetual Rivers, Paul Joseph Augustine Lelieur, Jaune, Comte de Paris, Madame Laffay, Bourbon Queen, Proserpine, Fleur d'Amour, Lady Stewart, Marie de Nerra, Pompone bicolor, Enchantress, and Ne Plus Ultra.—Second Prize. Messrs. Lane: Devoniensis, General Christiana, Grandissima, Duchess Montebello, Prince de Provence, Blush Provence, D'Angrusseau, Duc de Trevise, Charles Duval, White Globe Hip, Belle de Rosny, Cynthe, Chatelaine, Paul Joseph, Queen, Lafitte, La Seduisante, Berryer, General Foy, Boula de Nanteuil, Triomphe de la Guerre, Ohl, Eugene Barbot, Bizarre Marbre, Queen of Denmark, Madam Hardy, Lady A. Peel, Duchess of Sutherland, William Jesse, Prince of Wales, Aubernon, Robin Hood, Madame Laffay, and Miss Elliott.—Third Prize. Messrs. H. and C. Cobbett, nurserymen, of Chobham, near Bagshot: William Jesse, Madame Laffay, Nuralba, Royal Provence, Unique Provence, Victor Hugo, Bouquet de Flore, Lady Warrender, Armosa, Acidalie, Madame Desprez, Félicité Perpétuel, Village Maid, Madame Marana, General Allard, and Elise Sauvage.—Fourth Prize. Mr. Francis, nurseryman, of Hertford: Jaune Desprez, Augustine Lelieur, Rose du Roi, Belle Marie, Lamarque, Madame Laffay, Queen of Denmark, Triomphe de Plantier, Latifolia, Louis Buonaparte, Madam Newman, William Jesse, General Lamarque, Devoniensis, General Soyez, Leopold, Chatelaine, Beauty of Billiard, Elise Sauvage, Princess Helene, Lady Fordwich, Queen of Bourbons, and Comte de Paris.—Fifth Prize. Mr. Cripps: Euphrosine, Nelly, New Village Maid, Triomphe des Dames, Prudence Rœser, Armide, Jaune Desprez, Madame Laffay, Bourbon Queen, Leopold, William Jesse, Lyonnaise, L'Anglaise, La Pactole, Daphne, and La Colambraine.—Moss Roses were produced by Messrs. Lane and Cobbett; but the latter were certainly inferior. Messrs. Lane's consisted of Crimson, Mottled, Crested, Perpetual White, Prolific, Luxembourg, Malvina, White Bath, Common, Eclatante, and Aspase; and the best of Messrs. Cobbett's were Unique, Prolific, Luxembourg, Blush, and Mousseuse Partout.

Two magnificently grand Wardian cases were sent for exhibition by Mr. Potts, of Shrewsbury. They were glazed with the finest sheet-glass, and the framework, which was Gothic, was all gilded. We cannot imagine a finer piece of furniture for a drawing-room than one of these cases, nor a finer habitation for plants while in the drawing-room.

The exhibition of *Fuchsias* was considerable, and many fine and magnificent specimens were exhibited; but good as they were, there was too great a similarity in the colour, and these elegant flowers will never make an effective display unless the sorts are judiciously chosen, and a watchful regard paid to contrast of colour. Each collection should contain the greatest range of variety the flower possesses. First Prize: Large Silver Medal, Mr. Gaines, for Decora, Nobilissima, Britannia, Alata, Eclipse, Robusta, Paragon, Eppsii, Champion, Pulcherrima, and Defiance. Second Prize: Mr. Laing, for Venus Victrix, Eppsii, Dalstoni, Victory, Stanwelliana, Defiance, Bridegroom, Kentish Hero, Insignis, Conspicua arborea, Chandlerii, and Magnifica. The Silver Knightian, Mr. Ayres, gardener to W. Cook, Esq., Brooklands, Blackheath, for Attractor, Balloonii, Stanwelliana, Epps's Marie, King John, Eppsii, Speciosa, Globosa major, Elegans, Exoniensis, Excelsa, and Duke of Wellington. The same medal to Mr. Kendall, of Stoke Newington, for Formosa elegans, Venus Victrix, Brockmannii, Eppsii, Stanwelliana, Compacta, Britannia, Defiance, Eclipse, Alata, Victory, and Robusta. The Silver Banksian Medal to Messrs. Lane and Son, for Laneii, Pulcherrima, Robusta, Defiance, Exoniensis, Magnifica, Fulgens, Paragon, Alata, Britannia, Brockmannii, and Eppsii; and the same medal to Messrs. Henderson, Pine-apple-place, for Le Chinois, Pulcherrima, Tricolor, Formosa elegans, Rosea elegans, Chauverii, Majestica, Closiot, Eppsii, Defiance, Lady Walsingham, and Venus Victrix.

*Picotees.*—An excellent display of these beautiful flowers, which are unquestionably rising in public estimation.

Amateurs' Class. First Prize: Large Silver Medal, Mr. C. Embleton, gardener to T. Barnard, Esq., for Wilmer's Prince Royal, John's Prince Albert, Sharp's Gem, Barnard's Mrs. Barnard and Lady Douro, Dickson's Bride and Trip to Cambridge, Wildman's Isabella, Burrough's Lady Douro, Robinson's Nottingham Hero, Sharp's Wellington, La Delicate, and Read's Favourite, Burrough's Mrs. Bevan, Waine's Victoria, Brinkler's Lady Chesterfield, Gidden's Miss Desborough, Teaser, and Vespasian, Hogg's Queen of England, Burrough's Lady Peel and Mrs. Benyon, Ely's Marquis of Waterford, and Anneiley's Sanspariel. Second Prize, G. Edmonds, Esq., Wandsworth, Silver Knightian Medal, for Willmer's Prince Royal, Barrand's Bride, Borderer, and Eclipse, Burrough's Mrs. Bevan, Annersley's Sanspariel and Mrs. Willoughby, Jessop's Sir W. Middleton, Cox's Victoria Regina, Wildman's Isabella, Wain's Victoria, Dickson's Trip to Cambridge, Kirtland's Wellington and Princess Augusta, Wood's Lady St. John, John's Prince Albert, Gidden's Sir R. Peel, Princess Royal, Teaser, and Don Juan, Lady Flower, Garrat's Lady Dacre, Brinkler's Conductor, and Crask's Queen Victoria.

Nurserymen's Class. First Prize: Large Silver Medal, Mr. J. Dickson, of Acre-lane, for Barrand's Portia and Cornelius, Sharp's Gem, Criterion, La Delicate, and Agitator, Dickson's No. 10, No. 2, Lady Jane Grey, Charles Stamford, No. 8, and No. 6, Burrough's Mrs. Bevan, Gidden's Vespasian, Hero of Nottingham, Wildman's Isabella, Gidden's Lydia and Teaser, Kirtland's Princess Augusta of Cambridge, Beauty of Reading, Queen Victoria, and Duke of Wellington, Wain's Queen Victoria, and Willmer's Prince Royal. The Second Prize, Silver Knightian Medal, Messrs. Norman, of Woolwich, for Ely's Field Marshal, Halliday's Henrietta, Crask's Victoria, Wain's Queen Victoria, Dickson's Trip to Cambridge, Sharp's Gem, Barrand's Bride and Eclipse, Norwich Rival, Barnard's Mrs. Barnard, Wildman's Isabella, Burrough's Lady Flower and Lady Douro, Bennet's Seedling, Garrat's Champion, Woolwich Beauty, Gidden's Vespasian, Lady Dacre, Purpurea elegans, Halliday's Fair Phillis, Sharp's Invincible, Robinson's Duke of Wellington, Lovegrove's No. 5, and Purple Perfection. Third Prize, Silver Banksian, Mr. H. Ward, Woolwich, for Martin's Prince Albert, Gidden's Lady Dacre, Burrough's Lady Flower and Mrs. Bevan, Green's Queen, Crask's Victoria, Annette, Trude's Queen Victoria, John's Prince Albert, Wilson's Miss Fanny Irby, Brinkler's Lady Chesterfield, Barnard's Mrs. Barnard, Martin's Queen of Violets, Willmer's Prince Royal, Sharp's Invincible and Countess De Grey, Gidden's Vespasian, Burrough's Jim

Crow, Seedling, Purple Perfection, Dickson's Trip to Cambridge, Wain's Queen Victoria, Wood's Lord Hitchbrooke. Fourth Prize, Mr. Willmer, of Sunbury, for Gidden's Sir R. Peel, Miss Desborough, and Vespasian, Hufton's Queen of Sheba, Burrough's Miss Jane and Aurora, Willmer's Queen, Barrand's Portia, Cornelius, and Borderer, Dickson's Trip to Cambridge, Brinkler's Fairy Queen, Willmer's Peter the Great, Miss Browning, and Prince Roval, No. 10, Sharp's Cleopatra, Kirtland's Princess Augusta, Trude's Queen Victoria, Ely's Mrs. Horner, Field Marshal, and Marquis of Waterford, Hogg's Lady Acland, and Newell's Harlequin.

## FLORICULTURAL CALENDAR FOR AUGUST.

Greenhouse Plants.—All exotic trees and shrubs belonging to this department, that are in want of larger pots, or refreshment of new soil, should (if not performed last month) immediately be done.

*Pelargoniums.*—Plants done blooming should now be cut down; this will induce them to push fresh shoots; when they become two inches long, the plants should be repotted, (not before,) shaking off the old soil and replacing it with fresh compost. The young shoots thus produced will require thinning, those cut away clean may be struck where required. Calceolarias should be increased. Verbenas should now be increased in order to get well established plants to endure winter. This is the proper time to propagate Aloes, Sedums, and all others of a succulent nature, by means of suckers or bottom offsets; when detached from the parent, they should be potted singly into small pots, using light dry compost, and watering sparingly till they have taken root. In the first or second week at furthest, inoculation may be performed on any kinds of the Citrus genus. Camellias to bloom early should be placed in the greenhouse.

Flower Garden.—Propagate by means of slips, and parting the roots of any double-flowered and other desirable fibrous-rooted perennial plants done flowering. Auriculas should be cleared of all dead leaves, and shifted into fresh pots; prick out of the seed bed, where it was omitted last month, Seedling Auriculas and Polyanthuses, and place in a shady situation; seeds may also be sown of both kinds in boxes or pans. Carnations may still be layered, also Sweet-Williams, the earlier in the month the better. Those which were layered four or five weeks ago will now be sufficiently rooted to be taken away and planted in beds or pots. Also plant out Pink pipings, which were put in in June. Sow seeds of all kinds of bulbous-rooted plants in pans or boxes, such as Spring Cyclamen, Anemones, Ranunculuses, &c. &c. Those kind of bulbs wanted to increase should be taken up if the leaves be decayed, and the offsets taken off. Transplant into nursery beds seedling, perennial, and biennial plants sown in spring. In dry weather gather those flower seeds that are ripe of any desired kinds. Plant out such kinds of autumn flowering bulbs as yet remain unplanted. Heartsease, towards the end of the month, should be propagated by slips, put into a shady border, and kept quite moist till they have taken root; these will form fine strong plants for blooming the spring following. Buds of Roses may still be put in, the earlier the better. Any budded early and looking fresh may have the bandage loosened to allow room for swelling. All shoots below the bud should be rubbed off. Chrysanthemums should be topped, if not done last month, in order to form compact heads of flowers. The tops put in make dwarf, late blooming plants. Mignonette to bloom during winter should *now* be sown in pots.

*Ranunculuses*, &c., roots of, should now be taken up, and gradually and well dried.

Dahlias.—Thin out the shoots where large flowers are required. Water should be given copiously every evening, during dry weather. A strata of manure should be laid over the roots, which tends to promote the vigour of the plants.

1 Inga pulcherrima 2 Hindsia Violacea

THE

FLORICULTURAL CABINET,

SEPTEMBER 1st, 1844.

# PART I.

## EMBELLISHMENTS.

### ARTICLE I.

### INGA PULCHERRIMA.

This very handsome flowering plant is a native of Mexico, requiring in this country to be grown in a warm greenhouse. It flourishes freely in equal portions of sandy peat, loam, and well-rotted leaf mould, having a liberal drainage. It has bloomed freely in the collection of Mr. Jackson of Kingston Nursery, and who has exhibited pretty specimens of it. It is easy of culture, very ornamental, and interesting, and deserves to be grown wherever practicable. Also, may be procured at a cheap price.

### HINDSIA VIOLACEA. PORCELAIN-BLUE-FLOWERED.

This very handsome flowering greenhouse plant is closely allied to the Rondeletias, and was received from Brazil by Messrs. Veitch's of Exeter, who have exhibited specimens at the London shows. It is very easy of cultivation, growing freely and blooming profusely. It deserves to be grown in every greenhouse, the rich blue flowers being highly ornamental.

## ARTICLE II.

### HINTS ON THE EARLY FLOWERING OF SEEDLING PLANTS REQUESTED.

I OBSERVE an article in this month's Number of your most useful and valuable CABINET, entitled "Remarks on Hybridizing Plants, by an Amateur Florist," where he states that he directed his attention to the process last season with the "Amaryllis, Achimenes, Verbena, Fuchsia, Phlox, Pelargonium, and others;" and that now, this season, he has, "as the result, very numerous, and in almost endless variety, beautifully distinct flowers of the above, with the exception of the Amaryllis."

It is, in my opinion, of great consequence to all, and much more so to those who hybridize plants extensively, to obtain the result of their labours as soon as possible, and ascertain what value and properties the numerous seedling plants may possess, as we may be, and in all probability are, crowding our houses with hundreds of the same kind, and more likely thousands of plants that are worse than those we have procured the seed from, and therefore not worth keeping; for I consider no seedling variety worth house room and trouble that does not possess properties either in form or colour to mark it as a distinct and acceptable variety from any other yet produced; for, during the last few years, we have seen the market inundated with all sorts of new flowers, many of them having no other recommendation than that they are new hybridized varieties, no attention being paid to whether they are better or worse than their parents. And as I have found from experience how difficult it now is, after the many beautiful hybridized varieties of all florist flowers that have been sent out, to obtain a new plant that can recommend itself either for its novelty in fine form, or beauty of colour, or both combined; the great object of every one who raises seedlings must be to have them to produce their flowers as soon as possible. Yet, notwithstanding all my care with seedling Fuchsias, Pelargoniums, and some others, I cannot induce them to flower until the second season, or about eighteen months after sowing, and sometimes longer. Under these circumstances I would feel much obliged if your correspondent would favour me with a few hints to make my seedling Fuchsias and Pelargoniums flower early, as he has succeeded in flowering his of last summer's sowing.

This year I am following out a plan with some seedling Pelargoniums which were sown last season, about the end of July, viz., having given them a cool greenhouse all winter, I have them now planted out in pots in the open border, where they are growing most luxuriantly, but as yet without showing any flower buds. As the season advances, and before the cold weather sets in, I shall remove them to the greenhouse, where I expect them to flower before winter.

I have also many seedling Fuchsias of last season's sowing, but none of them have any indication as yet, nor do I expect them to flower this season. Thus the greenhouse must be occupied with seedling plants, which may turn out to be such as I would never think to occupy a border in the garden with in summer, far less crowding greenhouses with in winter, to the detriment of other and finer plants. So a few hints from "An Amateur Florist" will oblige, also,

Edinburgh. AN AMATEUR.

[We trust our correspondent, "an Amateur Florist," will comply with the request. If our Edinburgh correspondent will take care to have flowers of fine form as parents, the produce, no doubt, will be so in shape. Our Fuchsias, Verbenas, and other plants, seed sown in February, bloom by June following.—CONDUCTOR.]

## ARTICLE III.

### REMARKS ON THE ALOE.

BY SENEX.

THE derivation of this name is uncertain. Beginning with the syllable *al*, it is, perhaps, of Arabian origin; especially as the plant is much venerated in the East. In the Hebrew, a cognate language, it is called *ahalah;* some derive Aloes from the Greek *als* (the sea); others from the Latin, *adolendo;* but this can only refer to the Aloe-wood, which is used in sacrifices for its fragrance. On the whole it is probable the name was first applied to the Aloe-wood, and hence transferred to the common Aloes on account of their bitterness. Its medicinal virtues were made known to us by Dioscorides, the physician of Cleopatra; and it is also mentioned by Plutarch. The name Aloe is retained by all the European nations.

From the specimens we are in the habit of seeing in this country, we should be inclined to think that the utility of the Aloe far surpassed its beauty, and to rank it, as a vegetable, with the camel and the elephant in animal life. Like the larger animals, it is confined to hot, or comparatively uncivilized countries. Its appearance, which resembles a collection of huge leathern claws, armed with prickles, is very formidable; and even the smaller species have a sort of monstrosity of size in their parts, though small as a whole. But notwithstanding the extraordinary utility of the Aloe, those who have seen it in its native country, and in full flower, describe it as scarcely less remarkable for elegance and beauty. The larger and more useful kinds appear to be also the most beautiful. Rousseau uses the epithet beautiful in speaking of the great American Aloe, or Agave.

"Nature seems to have treated the Africans and Asiatics as barbarians," says St. Pierre, in speaking of the Aloe, "in having given them these at once magnificent, yet monstrous vegetables; and to have dealt with us as beings capable of sensibility and society. Oh, when shall I breathe the perfume of the honeysuckle?—again repose myself upon a carpet of milk-weed, saffron, and blue-bells, the food of our lowing herds? and once more hear Aurora welcomed with the songs of the labourer, blessed with freedom and content?"

The kind chiefly used in medicine is the Barbadoes Aloe, the preparations from which are eminent for the nauseousness of their bitter. "As bitter as aloes" is a proverbial phrase.

The most remarkable of the Aloe tribe is the great American Aloe, named by botanists Agave, which name is derived from the Greek, and signifies admirable or glorious; called by the French *aloe en arbre* (tree Aloe), and also *pitte*. The natural order in which it should be arranged is uncertain. Bernard Jussieu placed it with the Narcissi, and Anthony Jussieu with the Bromeliaceæ. It is a native of all the southern parts of America. The stem generally rises upwards of twenty feet high, and branches out on every side towards the top, so as to form a kind of pyramid. The slender shoots are garnished with greenish-yellow flowers, which come out in thick clusters at every joint, and continue long in beauty; a succession of new flowers being produced for near three months in favourable seasons, if the plant is protected from the autumnal cold. The elegance of the flower, and the rarity of its appearance in our cold climate, render it an object of such general curiosity that the gardener who possesses the plant announces it in the public papers, and builds a platform round it for the accommodation of the spectators. The popular opinions, that the Aloe flowers but once in a century, and that its blooming is attended with a noise like the report of a cannon, are equally without foundation. Some other plants are said to blow with this explosion. Thunberg says of the Talipot-tree, that when it is on the point of bursting forth from its leafy summit, the sheath which envelops the flower is very large, and when it bursts makes an explosion like the report of a cannon.

Miller suggests a curious and not improbable origin of this error with regard to the Aloe. "I suppose," says he, "the rise of this story might proceed from some persons saying, when one of these plants flowered, it made a great noise; meaning thereby, that whenever one of them flowered in England, it was spread abroad as an uncommon thing, and occasioned a great noise among the neighbouring inhabitants; most of whom usually repair to see it, as a thing that rarely happens, and as a great curiosity." The fact is, that the time which this plant takes to come to perfection varies with the climate. In hot countries, where they grow fast, and expand many leaves every season, they will flower in a few years; but in colder climates, where their growth is slow, they will be much longer in arriving at perfection. The leaves of the American Aloe are five or six feet long, and from six to nine inches broad, and three or four thick.

Millar mentions one of these plants in the garden of the King of Prussia, that was forty feet high; another in the royal garden at Friedricksberg in Denmark, two-and-twenty feet high, which had nineteen branches, bearing four thousand flowers; and a third in the botanic garden at Cambridge, which, at sixty years of age, had never borne flowers. He specifies some others, remarkable for the number of their flowers, but does not mention the age of any one at the time of flowering.

"With us," says Rousseau, "the term of its life is uncertain; and after having flowered, it produces a number of offsets, and dies."

Brydone, speaking of the approach to the city of Agrigentum, says, "The road on each side is bordered by a row of exceeding large American Aloes; upwards of one-third of them being at present in full blow, and making the most beautiful appearance that can be imagined. The flower-stems of this noble plant are in general betwixt twenty and thirty feet high (some of them more), and are covered with flowers from top to bottom; which taper regularly, and form a beautiful kind of pyramid, the base or pedestal of which is the fine spreading leaves of the plant. As this is esteemed in northern countries one of the greatest curiosities of the vegetable tribe, we were happy in seeing it in so great perfection; much greater, I think, than I had ever seen it before.

"With us, I think, it is vulgarly reckoned (though I believe falsely) that they only flower once in a hundred years. Here I was informed, that, at the latest, they always blow the sixth year, but for the most part the fifth. As the whole substance of the plant is carried into the stem and the flowers, the leaves begin to decay as soon as the blow is completed, and a numerous offspring of young plants are produced round the root of the old one. These are slipped off, and formed into new plantations, either for hedges or for avenues to their country-houses." Thunberg says that this Aloe is very common at the Cape; and although not a native, but imported from the botanic gardens of Europe, blossoms finely every year.

A kind of soap is prepared from the leaves, and the leaves themselves are used for scouring floors, pewter, &c.; their epidermis is serviceable to literature as a material for writing upon. The following extract from Wood's Zoography will give some idea of the general utility of this extraordinary plant:—

"The Mahometans respect the Aloe as a plant of a superior nature. In Egypt it may be said to bear some share in their religious ceremonies; since whoever returns from a pilgrimage to Mecca hangs it over his street-door as a proof of his having performed that holy journey. The superstitious Egyptians believe that this plant hinders evil spirits and apparitions from entering the house; and on this account, whoever walks the streets in Cairo, will find it over the doors of both Christians and Jews."

Maximilian, in his Travels in Brazil, mentions a species of Agave which grew by the sea-side (Agave fœtida), of which he says—"Its smooth-edged stiff leaves, eight or ten feet long, form strong hedges; and from the middle rises a thick stem thirty feet high, which bears at the top yellowish green flowers, and gives the landscape an original appearance. The pith of the stem, called *Pitta*, serves the collectors of insects instead of cork."

May not the French name *Pitte* be taken from this word *Pitta?*

Lavaysse, in his "Venezuela," says, the inhabitants make ropes from the *Agave fœtida* :—

"The leaves of the different specimens of Aloe, as well as the Agave, are highly serviceable to the natives of the countries where they grow. The negroes in Senegal make excellent ropes of them, which are not liable to rot in water; and of two kinds mentioned by Sir Hans Sloane, one is manufactured into fishing-lines, bow-strings, stockings, and hammocks; while the other has leaves, which, like those of the wild pine and the banana, hold rain-water, and thus afford a valuable refreshment to travellers in hot climates. The poor in Mexico derive almost every necessary of life from a species of Aloe. Besides making excellent hedges for their fields, its trunks serves instead of beams for the roofs of their houses, and its leaves supply the place of tiles. From these they obtain paper, thread, needles, clothing, shoes, stockings, and cordage; from the juice they make wine, honey, sugar, and vinegar."

Such of the Aloes as do not require a stove will bear the open air, in our climate, from the end of March to the end of September. During the winter they should be watered about once in a month; in the summer, when the weather is dry, once in a week or ten days; but when there is much rain they should be sheltered from it, or they will be apt to rot. If the weather be mild, they may be placed where they may receive the fresh air in the day-time for a month after they are housed; after that the windows should be closed. They should not be put into large pots, but should be removed into fresh earth every year, which should be done in July. As much of the earth should be shaken away as possible, the roots opened with the fingers, and such as are decayed taken off; but great care must be taken not to break or wound those which are young and fresh. Water them gently when newly planted, place them in the shade for three weeks, and if the weather is hot and dry, water them in a similar manner once or twice a week. Most of the species may at this time be increased by offsets, which should be planted in very small pots; and if, in taking off the suckers, you find them very moist where they are broken ftom the mother-root, they should lie in a dry shady place for a week before they are planted. When planted, treat them like the old plants. Such kinds as do not afford plenty of offsets may generally be propagated by taking off some of the under leaves, laying them to dry for ten days or a fortnight, and planting them, putting that part of the leaf which adhered to the old plant sbout an inch or an inch and a half into the earth. This should be done in June.

There are few things, I believe, more venerable, more eloquently impressive in their antiquity, than an old tree. The ruins of an old and noble edifice, of which every shattered fragment, every gaping cranny, complains of the destructive hand of time, is young and modern in our eyes, compared with that which still survives its touch, —the old ivy, that still, with every succeeding year, moves slowly on, knitting its creeping stalks into every crevice, and carrying its broad leaves up to the very summit. What can be more venerable than the far-spreading roots of an old elm or oak tree, veining the earth with wood! Cross but that little piece of wood, called the wilderness, leading from Hampstead towards North End, where the intermingled roots are visible at every step, casing the earth in impenetrable armour, and forming a natural pavement, apparently as old as time itself—can all the antiquities of Egypt command a greater reverence?

The larger species of Aloe, from the immensity of its size, and the known slowness of its growth, must speak the same impressive language. Mr. Campbell has put it in a noble attitude for the occasion:

> "Rocks sublime
> To human art a sportive semblance bore,
> And yellow lichens colour'd all the clime
> Like moonlight battlements, and towers decay'd by time.
> But high in amphitheatre above,
> His arms the everlasting aloe threw."

The Abbé la Pluche gives an interesting account of the uses of the Chinese Aloe, commonly called Wood-aloes, or Aloes-wood; from whence, as has been supposed, the name of aloe has been transferred to the common species.

" This Aloe," says he, " is as tall as the olive-tree, and of much the same shape: there are three sorts of wood contained under its bark; the first is black, compact, and heavy; the second swarthy, and as light as touchwood; the third, which lies near the heart, diffuses a powerful fragrance. The first is known by the name of eagle-wood, and is a scarce commodity; the second, calembouc-wood, which is transported into Europe, where it is highly esteemed as an excellent drug; it burns like wax, and, when thrown into the fire, has an aromatic odour. The third, which is the heart, and called calambac, or tambac-wood, is a more valuable commodity in the Indies than gold itself. It is used for perfuming the clothes and the apartments of persons of distinction; and is a specific medicine for persons affected with fainting-fits, or with the palsy.* The Indians, likewise, set their most costly jewels in this wood. The leaves of this tree are sometimes used instead of slates for roofing houses; are manufactured into dishes and plates, and, when well dried, are fit to be brought to table. If stripped betimes of their nerves and fibres, they are used as hemp, and manufactured into a thread. Of the points, with which the branches abound, are made nails, darts, and awls. The Indians pierce holes in their ears with the last, when they propose to honour the devil with some peculiar testimonies of their devotion. If any orifice or aperture be made in this tree by cutting off any of its buds, a sweet vinous liquor effuses in abundance from the wound, which proves an agreeable liquor to drink when fresh, and in process of time becomes an excellent vinegar. The wood of the branches is very agreeable to the taste, and has something of the flavour of a candied citron. The roots themselves are of service, and are frequently converted into ropes. To conclude, a whole family may subsist on, reside in, and be decently clothed by, one of these Aloes."

The common writing-paper in Cochin-China is made from the bark of this tree; of which the botanical name is aquilaria, from *aquila*, an eagle, so named because it grows in lofty places; and from its bitter taste, also termed Wood-aloes.

The great antiquity of the use of Wood-aloe as a perfume is shown by the Bible: "All thy garments," says a passage in the Psalms, "smell of myrrh, and aloes, and cassia:" and Solomon, addressing the object of his love, says, "Thy plants are an orchard of pomegranates, with pleasant fruits; camphire, with spikenard; spikenard and saffron; calamus and cinnamon, with all trees of frankincense; myrrh and aloes, with all the chief spices: a fountain of gardens, a well of living waters, and streams from Lebanon:" upon which, the object of his love, as if in an enthusiasm of delight at his speaking so of the place she lives in, beautifully exclaims, "Awake, O north wind; and come, thou south; blow upon my garden, that the spices thereof may come out. Let my beloved come into his garden, and eat his pleasant fruits."

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* The pieces of this wood are carefully preserved in pewter boxes, to prevent their drying; when used, they are ground upon a marble with such liquids as are best suited for the purpose intended.—HARRIS's *Natural History of the Bible*, p. 9.

Moore describes the Aloes-wood burnt as a perfume in a Persian palace:

> "Here the way leads o'er tesselated floors,
> Or mats of Cairo, through long corridors,
> Where, ranged in Cassolets, and silver urns,
> Sweet wood of aloe or of sandal burns;
> And spicy rods, such as illume at night
> The bowers of Tibet, send forth odorous light,
> Like Peri's wand, when pointing out the road
> For some pure spirit to its blest abode."

Latrobe describes a very beautiful Aloe growing at the Cape, with most brilliant flowers:

"Large Aloes were interspersed among the bushes, and with their broad leaves form a striking contrast to the many small-leaved evergreens which surround them. Some of them were in full bloom, towering above the thicket, and one more perfect than the rest was brought into the waggon. The flower consisted of seven branches, one in the centre, and six surrounding it at regular distances. The centre branch was a foot and a half long, the rest about thirteen inches, all thickly covered with a succession of long, bell-shaped flowers, each orange-coloured at the stem, and passing into bright vermilion towards the top. The brilliant appearance of this huge flower, or mass of flowers, disposed like a chandelier, and mounted on a stem six feet in height, with a capital of massive leaves, spreading above three feet in diameter, is beyond conception grand."

He mentions another, of smaller growth, extremely beautiful also:

"The waste produces some beautiful plants, among which I particularly noticed the Fahlblar, a species of Aloe, the leaves of which are round, of a pale blue colour, and spreading near the ground; the stalk about a foot long, and the flowers, which are bell-shaped, and of a deep scarlet, hanging down in clusters."

A lover of flowers will sympathize with this author in the regret he describes himself to have felt, in the course of preparation for building a new church: "By the grubbing up, and removing these stones, which may have lain there since the deluge, many flowers, much beautiful shrubbery, and a great quantity of Aloes were destroyed. I defended them as long as I could, but was obliged to submit to the necessity of using the stones. The ground was strewed with flowers and bulbs, shattered Aloe-leaves and beautiful plants, but I was assured for my comfort, that, after a short rest, the earth would bring forth abundantly, and the Aloes and Fahlblar again adorn the spot."

## ARTICLE IV.

### REMARKS ON GROWING PLANTS IN GLASS CASES,

BY CALEDONICUS.

(*Continued from page* 157.)

THE great influence which light thus exerts on the colour and properties of plants must be regarded as altogether local in its operation, affecting only those parts to which it has free access; and, accordingly, the green colour, and other properties to which light gives rise, may be again obliterated by the simple exclusion of that powerful agent. "Thus, if a portion of a growing fruit," says M. Senebier, "be covered with a piece of tin foil, the uncovered portion may become perfectly red, whilst the covered part exhibits only a pale or yellowish hue; or grapes, which would have acquired a violet colour under a full exposure to light, take on a greyish hue if enclosed in black paper. Those leaves, too, which may only partially cover growing fruit, and thereby intercept the sun's rays, delineate, as it were, on the fruit beneath, the limits they set to its action.—(*Mém. Phys. Chimiques*, tom. iii. p. 146.) In this manner apples or other fruits may be marked with the impressions of leaves artificially glued on them; and fruits so marked, it is said, are often exposed for sale in the bazaars of Persia. In North America the operation of light, in colouring the leaves of plants, is sometimes exhibited on a great scale, and in a very striking manner. Over the vast forests of that country clouds sometimes spread and continue for many days, so as almost entirely to intercept the light of the sun. In one instance, just about the period of vernation, the sun had not shone for twenty days, during which time the leaves of the trees had reached nearly their full size, but were of a pale or whitish colour. One forenoon the sun broke forth in full brightness; and the colour of the leaves changed so fast, that, by the middle of the afternoon, the whole forest, for many miles in length, exhibited its usual summer dress. Of this local action of light the gardener avails himself on many occasions; and by various modes of excluding this agent from particular parts of plants, so as to effect their etiolation, he is enabled so far to modify or change, not only their colour, but their more active properties, as, in some instances, to improve their natural qualities as articles of food, and, in others, to deprive them of those which might render them unsavoury or unwholesome.

The progress of coloration in an etiolated leaf, when exposed to sunshine, was observed by Senebier. The most tender parts first pass from white to yellow; the yellow then becomes deeper; next, some green spots appear on different parts, which multiply, extend, and meet, till the whole exhibits a green colour. This progressive coloration is effected exteriorly by the action of light, and is independent of the internal vegetation of the organ.—(*Mém. Phys. Chim.*, tom. ii. p. 88.) The time required for producing the effect will vary with the degree of light, and the age, texture, and peculiarities of the plant. The leaves of French beans, which sprang white out of the earth, were observed by Senebier to become green in an hour, under exposure to an ardent sun; and, when etiolated leaves were immersed in water, they became green, under exposure to sunshine in the same way as in the free atmosphere.—(*Ibid.*, p. 78—91.)

The matter thus acted on by light is contained in the cells of the parenchyma: it is green in the leaves, but of different colours in other organs of the plant: it is in its nature resinous and soluble in alcohol. By De Candolle it has been named chromule, from the Greek word signifying colour. It is the cause of colour in all vegetable surfaces, is common to other parts as well as to the leaves, and exhibits different colours in the leaves at different periods of the year.—(*Physiologie Végétale*, tom. i. p. 321.) In addition to this chromule, there is another matter in the leaves and flowers, which, when extracted by water, exhibits a red colour on the addition of acids, and a yellow or green one on the addition of alkalies. This matter, or "colourable principle," has been named chromogen by Dr. Hope, the distinguished professor of chemistry in this university, in a memoir on the "Coloured and Colourable Matters in the Leaves and Flowers of Plants," read to the Royal Society of Edinburgh in 1837. From numerous experiments, made on various leaves and flowers, Dr. Hope was led to the conclusion that chromogen, or the "colourable principle," is not an individual substance, as hitherto supposed, but that there are two distinct principles—one, which forms the red compound with acids, which he names erythrogen; and another, which affords a yellow compound with alkalies, which he calls xanthogen. These principles exist sometimes separately and sometimes together in different plants, or in different parts of the same plant. All green leaves, all white and all yellow flowers, and white fruits, contain xanthogen alone; whilst in red and blue flowers, and in the leaves of a few plants which exhibit the former of these tints, these two principles occur together. In ten flowers possessing an orange chromule, and in the corolla of twenty purple flowers, both colourable principles were also found. Other parts of flowers, as the calyx, bracteæ, &c., comported themselves as the corresponding coloured chromules of the flowers do. Litmus presented the solitary example of a substance abounding largely in erythrogen, but containing no xanthogen. Light, adds Dr. Hope, was indispensable for the production of the green chromule of leaves, but not for the formation of some of the finest tints of flowers and fruits, if essential for any: differences connected, probably, with the fact, that the formation of the green colour in leaves is always accompanied, or rather preceded, by the evolution of oxygen gas; whilst, under every degree of light, flowers always deteriorate the air.

As the solar light consists of rays possessing very different powers, M. Senebier endeavoured to discover to which species of rays the coloration of the leaves of plants was to be specially ascribed. Scheele had remarked that the violet rays of the prismatic spectrum acted soonest in blackening muriate of silver, a fact confirmed by the experiments of Senebier, who extended the same views to the action of light in the coloration of plants. He caused young colourless plants to grow in different glass vessels, so constructed that the light which fell upon them should first pass through fluids of different colours, red, yellow, and violet. At the end of four or five weeks the leaves which had been exposed to red light had a tinge of green; those in the yellow light were at first green, but afterwards became yellow; and those in violet light were quite green, and the depth of colour increased with their age. (*Mém. Phys. Chim.*, tom. ii. p. 55, *et seq.*) The subsequent experiments of Ritter and Wollaston have shown that these effects were produced, not by the coloured rays, but by certain invisible rays associated with them, and which exist in greatest force at and beyond the boundary of the violet extremity of the spectrum. To these rays have been assigned the names of the chemical or deoxidating rays; of their deoxidating power we shall have abundant evidence in the next section.

(*To be continued.*)

## ARTICLE V.

## ON RAISING ROSES FROM SEED.

BY ROSA.

In recent Numbers of the Floricultural Cabinet I have with pleasure noticed the observations on hybridizing various plants, with a view to the increased improvements of the various genera of ornamental plants. I have for several years directed my attention to raising Roses from seed, and my efforts have been successful in raising some of the finest new Roses which now grace our best collections.

During the months of September and October I repaired to several first-rate nursery collections of Roses, in order to see which kinds, in each class of Roses, bore fruit the most freely, and ripened the earliest; and I then procured several of each class, which I planted at the proper season. These bloomed the following summer, and having a very extensive collection of nearly all the finest double Roses, I carefully selected farina from the best of the double flowers, and impregnated the fruit-bearing kinds therewith. The fruit-bearing flowers are generally not quite double, and I found it to be of use to thin out the larger trusses of flowers, so as to leave about half a dozen in a head of the plumpest buds.

In the process of impregnation, just as the flowers to be impregnated are expanding, I cut away the anthers therein by means of a small pointed penknife or scissors, this prevents natural seedlings being produced from the kind. Where I had a specific design in the impregnation of any two kinds, after the operation had been effected I tied a piece of fine gauze over the head of bloom to prevent access by bees, &c.

In Autumn, as soon as the side was ripe, I had it gathered and placed in gauze bags, and so kept in the seed-vessel till required for sowing. Early in Spring I sow the seed thinly in boxes, and place them in a gentle heat in a common frame, keeping the soil moist, not wet, till that portion which then pushes appears to have done entire for that season. When the plants can be safely transplanted I have them carefully taken up, and planted in a rich soil and warm situation in the open garden, where they remain to bloom. The general quantity of the seed does not come up the first season, but remains to the second. I therefore have the boxes kept just moist, till the end of the summer, and then remove them into a dry place during winter. Early in spring place them in a gentle heat, and all the good seeds soon push forth plants, which are treated as before named. Seed may be quite successfully treated by sowing in the open border, having it in a warm situation, and keeping it moist by covering the bed over with moss, &c. Two years are required here as in the former named instance, to get up the whole. During winter I usually spread dry leaves betwixt the plants that come up, and remain in the seed bed, so they be secured from injury by frost, being yet tender; this protection is removed at the spring. Moss or tanners' bark may be substituted for dry leaves where the latter are objected to.

I have paid particular attention to crossing the most distant classes, as well as to obtain kinds which will bloom the longest period, and to get fine-coloured, fragrant, and very double Roses. The following kinds I have found to seed freely.

HYBRID CHINAS.—Athelin, Celine, Princess Augusta, Duke of Devonshire, Globe White Hip, Aurora, Ne plus Ultra, Henri Barbet, General Allard, and Chatelain. These, and others of the class, I impregnated with the best Bourbon or Perpetual kinds, in order to obtain some fine hardy autumnal Roses.

Ayrshires and Sempervirens.—Ruga, Leopoldine d'Orleans and Splendens were impregnated with the darkest flowers of others.

Brier Roses.—Harrisonii, and Double Yellow.

Moss.—Eclatante, Single Crimson, and Du Luxembourg.

Bourbons.—Dubourg, Gloire de Rosamenes, Bouquet de Flore, Augustine Lelieur, De Lisle, and Emile Courtier.

Chinas.—Henri Cinque, Alba, Camellia Blanc, Therese Stravius, Belle Elvire, Madame Bureau.

Tea-scented.—Jaune, Lyonnais, Caroline, Bardon, Goubault, Belle Allemande, Lady Granville.

Gallicas.—Of this class numerous.

## ARTICLE VI.

## ON DESTROYING THE RED SPIDER.

BY A FOREMAN OF A LONDON NURSERY.

I have been in the situation I now hold for the last ten years, and previously in the garden of a nobleman for seven; in both places I have had the care of fruit and plant houses, and, as a matter of course, I have had to contend with the Red Spider. Twelve years back I had a number of Vines, hothouse as well as greenhouse plants, attacked most ravenously by these detestable little scoundrels; I was advised to procure some common sulphur, using a quarter of a pound to a house of about eight or ten yards long. The mode of application was as follows: the sulphur being put into a large bowl, a large painter's dusting-brush was dipped in water, and after rolling it round in the sulphur, I laid it over, like painting, the hot water pipes and fire-flues, putting the least proportion where the pipes or flues were hottest. I chose a dull day for the purpose, and kept the house close all day, unless the sun broke out, when a small ventilation was given in order to allow the strong fumes to escape. This plan succeeded to expectation, and a repetition of this practice three times each year has kept my plants entirely free.

It is a custom with me to have each plant-house white-washed early every spring; and with three houses I mixed the sulphur, using the same proportion, with the quicklime-wash, and thus applying them together. This has succeeded also.

By the above attentions such plants as Thunbergias, &c., which are very liable to be attacked by the insect, are kept perfectly free and flourish vigorously. Fuchsias I find cannot bear the sulphur fumes, I therefore remove them when applying the sulphur, and keep the house closed. They might probably bear it if of a much lower degree of intensity.

# PART II.

## LIST OF NEW AND RARE PLANTS.

**AERIDES VIRENS. GREEN-LEAVED AIR PLANT.** (Bot Reg. 41.) Orchidaceæ. Gynandria Monandria. Sent from Java to Messrs. Loddiges's, with whom it has bloomed. It is a beautiful addittion to this interesting family. Sepals and petals French white, each having a deep purple blotch at the end. Lip same colour, speckled with crimson, and having a green curved tip. The flowers are produced on a pendulous raceme, about six inches long, each blossom being an inch and a half across. They are deliciously fragrant.

**ASCLEPIAS VESTITA. HAIRY-STEMMED.** (Bot. Mag. 4106.) Asclepidaceæ. Pentandria Digynia. From North America, seeds having been received from thence by Messrs. Veitchs, of Exeter. It is a herbaceous perennial plant. The flowers are numerously produced, in dense umbels of from twenty to thirty blossoms in each. Each blossom is about half an inch across, of a yellowish green, the underside of the calyx of a reddish purple colour.

**BERBERIS UMBELLATA. UMBELLATE.** (Bot. Reg. 44.) Berberaceæ. Hexandria Monogynia. (Synonym Berberis floribunda.) A hardy sub-evergreen bush, growing about three feet high, which has been raised in the garden of the London Horticultural Society. The flowers are produced abundantly in June, in racemes each about two inches long, of a bright yellow colour, each segment of the calyx having a red tip. The plant is easily distinguished by its narrow spineless leaves.

**DRYANDRA FORMOSA. THE SPLENDID.** (Bot. Mag. 4102.) Proteaceæ. Tetrandria Monogynia. From South-west Australia. It is grown in the Royal Gardens, Kew. The flowers are of a rich yellow, tinged with a reddish brown. It is a noble and (when in bloom) a highly interesting proteaceous plant. The one in the Kew collection is now about five yards high, making a fine conservatory plant.

**EPIDENDRUM VITELLINUM. YOLK-OF-EGG EPIDENDRUM.** (Bot. Mag. 4107.) From Oaxaca, in Mexico, which has bloomed in the Kew collection. The flower-scape rises about a foot high, bearing a raceme of rich flowers. Sepals and petals of a fine orange colour; labellum of a bright yellow. Each blossom is near two inches across.

**HABROTHAMNUS ELEGANS. ELEGANT.** (Bot. Reg. 43.) Cestraceæ. Pentandria Monogynia. A native of Mexico, specimens of which have been sent to this country by Mr. Van Houtte, nurseryman, of Ghent. It is a smooth, soft-wooded, shrubby plant, requiring a similar treatment to Pelargoniums. The plant is branching. The flowers are produced in terminal cymes of nearly twenty blossoms in each. The tube of the corolla is ventricose, three quarters of an inch long. The limb (mouth of the flower) is five-parted, about three eighths across. It is said that the flower is of a bright carmine. It is a pretty and interesting greenhouse plant, well deserving cultivation.

MICROSTYLIS HISTIONANTHA. SAIL-FLOWERED. (Bot. Mag. 4103.) Orchidaceæ. Gynandria Monandria. A very remarkable terrestrial orchideous plant, a native of Columbia. It has bloomed in the collections at Kew and the Royal Botanic Garden, Regent's Park, London. The flowers are produced in a compact concave umbel, of a brownish green colour.

ODONTOGLOSSUM PULCHELLUM. THE ELEGANT. (Bot. Mag. 4104.) Orchideæ. Gynandria Monandria. A native of Guatemala. It has bloomed with Mr. Bateman, as well as at Kew. The flower scape is a foot long; the flowers are produced in a rather loose spike or raceme, of ten or twelve in each. The blossoms are of a pure white, excepting there being a red spot on a yellow ground at the base of the labellum. The flowers are very delicately beautiful.

SIPHOCAMPYLUS LANTANIFOLIUS. LANTANA-LEAVED. (Bot. Mag. 4105.) Lobeliaceæ. Pentandria Monogynia. Collected in Caraccas. It is an erect shrubby plant, which requires a warm greenhouse or coolish stove. The flowers are produced numerously, in a corymbous raceme. Each blossom is about two inches long. Inside the tube flesh-colour, outside of a rich rose shaded with red. It is a pretty-looking plant, blooming in the early spring months, and is easily propagated by cuttings.

STENOMESSON HARTIVEGGII. MR. HARTWEGS. (Bot. Reg. 42.) Amaryllidaceæ. Hexandria Monogynia. Found by Mr. Hartweg, at Hacienda del Ixo, in the province of Quito, at the height of 11,800 feet above the sea. The flower-stem rises a foot high; each produces two pendant blossoms, of a bright orange colour. Each blossom is about an inch long, and three quarters across the mouth. It has bloomed in the garden of the London Horticultural Society.

MARTYNIA LUTEA. YELLOW-FLOWERED. (Pax. Mag. Bot.) Pedaliaceæ. Didynamia Angiospermia. From Brazil to the Dean of Manchester, in whose greenhouse collection at Spofforth it has bloomed. It is an annual plant, branching, growing half a yard high. Each branch is terminated by a large clustered head of flowers, nearly the size and form of the common wild Foxglove. They are of a rich orange-yellow colour, spotted with red. We saw it in bloom at Mr. Lowe's, of Clapton Nursery.

JACARANDA MIMOSIFOLIA. MIMOSA-LEAVED. (Pax. Mag. Bot.) Bignoniaceæ. Didynamia Angiospermia. A native of Brazil. It is a beautiful trumpet-flowered plant. The blossoms are produced in large terminal panicles, drooping. Each blossom is nearly two inches long, and three quarters across the mouth, of a beautiful blue colour. Plants can be made to bloom when not more than six inches, a foot, or half a yard high, as at pleasure, by striking the terminal portions of the lateral branches. It well deserves a place in every plant stove, its large panicled heads of blue flowers being very beautiful.

DENDROBIUM DALHOUSIEANUM. LADY DALHOUSIE'S. (Pax. Mag. Bot.) Orchideæ. Gynandria Monandria. Sent from Calcutta Botanic Garden to Chatsworth, where it has bloomed, as also with Messrs. Loddiges. The flower-stem rises a yard high. The flowers are produced in a drooping raceme of from eight to twelve in each. A separate blossom is near four inches across. Sepals and petals, of a pale rosy-pink near to the margin, and the rest of a delicate yellowish white. Labellum boat-shaped, the tip part white, yellowish towards the base; and on each side the base there is a large dark spot peculiarly striking. It is a very noble flowering species, which blooms in the Calcutta garden in the dry season, which circumstance points out its treatment in this country.

# PART III.

# MISCELLANEOUS INTELLIGENCE.

## QUERIES.

**On Seedling Carnations.**—A constant reader will be much obliged by a little information on the subject of seedling Carnations, having raised some of these (from, she fears, bad seed), and they having all proved single. She will be glad to be informed whether, if she kept them until the following summer, they would be likely to become more double. An answer in the next number of the Cabinet will much oblige

July 8th. Egeria.

[The single ones will not become double. If there be any that are semi-double, such may become double when treated as Carnations in general are.—Conductor.]

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**On the Wire-Worm.**—Can you, or any of your correspondents, inform me the best method of destroying the wire-worms, as, with me, they eat everything that they meet with. I had been told that hops strewed over the ground was a very effective plan; but, on trial, instead of destroying them, I found that they fattened the more from it. I must confess, however, that it brought them more readily to the surface of the ground, so that the plan adopted may be more properly termed a trap than a poison. I am informed there is a solution, a chemical mixture, that when applied to the ground brings them to the surface, like the earth-worm, with the solution of corrosive sublimate. This year I have lost nearly the entire stock of two beds of Pinks, all my Picotees and Carnations, and a great number of my seedling and named kinds of Dahlias. An early information as to a successful remedy will oblige

Leipsic-road, Camberwell. C. C. Clark.

P.S. I have a great quantity of Ranunculus seed, which is three years old. Is it better, or otherwise, being so long kept?

[It is most probable that very few, if any, will now vegetate, and such as do will have derived no benefit by the long keeping.—Conductor.]

**Achimeneses.**—I have procured nearly all the new Achimeneses. How am I to succeed with them the coming autumn and winter? A. B.

[When the plant ceases to bloom withhold water, place them where they will be dry and free from frost; keep them so through winter. Early in February give them a good watering, place them where they can have heat, say in a cucumber-bed frame, &c. The plants will soon push; then separate them from the parent stock, potting them singly into small pots, and repot as necessary. See articles on culture in former numbers.—Conductor.]

## REMARKS.

### LONDON HORTICULTURAL SOCIETY, REGENT STREET.

*August 6th.*—The exhibition included several objects of great interest. Two magnificent specimens of Fuchsia exoniensis were contributed by Mr. Ayres, gardener to J. Cook, Esq. This Fuchsia is well known to produce flowers of the finest colour and best form; but when it was shown at a former exhibition, some doubts were entertained with respect to its habit of growth. These plants were upwards of five feet high, and their gracefully drooping branches, covering the pot, were loaded with blossoms, and were clothed from top to bottom with abundance of fine healthy foliage. From the same gardens were Pentas carnea

and Achimenes multiflora in very fine condition, and also another sort named Beatonii, bearing much resemblance to the old A. coccinea; together with a most beautiful Clerodendron paniculatum, in a state of great perfection, producing a spike of flowers fully 18 inches long. A Knightian Medal was given for this, and a Banksian was awarded to the three first-mentioned plants.—Mr. Mountjoy, of Ealing, was awarded a Knightian Medal for a most beautiful specimen of the red-flowering Lilium speciosum, having four branches, bearing no less than 70 of its showy blossoms. From the same collection was also Pentas carnea, a Gladiolus named Glory of Ghent, with large vermilion and yellow flowers, and apparently raised between G. cardinalis crossed with psittacinus, and specimens of Phlox Van Houttii, which, on account of its beautifully-striped flowers, is so great an acquisition to hardy herbaceous plants. Mr. Mountjoy also sent Gloxinia cerina, flowers of a seedling Loasa, and a Plectranthus with pale-blue flowers.—Mr. Edmonds, gardener to the Duke of Devonshire, received a Knightian Medal for an excellent Cattleya crispa, in good health, and having five fine spikes loaded with showy blossoms.—From Messrs. Henderson, of Pine-apple-place, were Cleome pentaphylla, Linaria triornithophora, called fissa, and a fine mass of Achimenes hirsuta, in profuse bloom, growing in a shallow pan. Messrs. Henderson stated that they grow all the varieties of Achimenes in shallow pans; and they imagine that the plants flower much better under such treatment than when they are planted in deep pots. It is probable that this, as well as some of the other sorts which are apt to become too luxuriant, and consequently flower but sparingly, would do better if they were *grown on blocks*, and were treated similarly to Orchidaceous epiphytes. This has been partly proved in the garden of the Horticultural Society, where a bulb of A. pedunculata accidentally got into the moss on a block along with one of the Orchidaceous plants, where it is now growing, and, although one of the worst of them to flower, it is quite a mass of bloom. Messrs. Henderson also sent a new Heath, named Hendersonii, with bright pink flowers; and a fine specimen of Babingtonia camphorosmæ, a fine autumn-flowering plant, with Heath-like foliage, and producing fine spikes of delicate pink blossoms. A Banksian Medal was awarded for the Heath, Babingtonia camphorosmæ, and Achimenes hirsuta.—From Mr. Jackson, of Kingston, was a Lobelia-looking plant, with dark purple flowers, belonging to the genus Tupa, but named a species of Cristaria. It was from South America, and is new to gardens.—Mr. Robertson, gardener to Mrs. Lawrence, sent a plant of the very useful Niphæa oblonga, Oncidium Papilio superbum, volubile, and Stanhopea graveolens, called a variety of Oculata; the pale variety of Cattleya Mossiæ, with large showy lilac blossoms; the insignificant-looking, but rare, Epidendrum glaucum, and another Orchidaceous plant, having small green flowers, with the lip striped with brown; several fine specimens of Heaths, and a magnificent Cuphea Melvilla, covered with blossoms, for which a Knightian Medal was awarded.—From the garden of G. F. Cox, Esq., of Stockwell, were some good Orchidaceous plants, including Cymbidium lancifolium, Cycnoches ventricosum, Catasetum Russellianum, with watery-looking pale-green flowers; the rare Sophronitis cernua, Eulophia cochlearis, small, but in good health; Oncidium Papilio, and the red and white varieties of Lilium speciosum, together with the beautiful Dendrobium chrysanthum, and the true Stanhopea oculata, for which, as well as for the Dendrobium, a Banksian Medal was awarded.—Good specimens of Fuchsia exoniensis were contributed by Mr. Kendall, of Stoke Newington, and Mr. Chandler, of Vauxhall, confirming the fact so abundantly prove
plants, that this Fuchsia has an excellent habit. Mr. [illegible]
ling Pelargonium, named Warrior.—From [illegible]
Fuchsia, named Beauty Supreme; and another, [illegible]
Cormack, of Deptford.—A specimen of the pale variety of Cata
was sent from the garden of J. H. Schroder, Esq., of Brixton.—
and Son, of Exeter, exhibited what they considered to be a new
topodium, sent from Peru by their collector, Mr. Lobb, but
be only a pale variety of C. punctatum; and [illegible]
sufficient beauty to render it of much moment in a [illegible]
Of Fruit there were some good specimens.—From [illegible]

was the well-known Mormodes aromaticum, Catasetum Russellianum, and a new variety of Dendrobium secundum, received from Mr. Fortune, who found it growing about Anger Point. It produces beautiful racemes of dark purple blossoms, which are quite different from the pale flowers of the old species. From the same collection was also the new Achimenes picta, which, independently of the beauty of its flowers, has a pretty grayish-striped foliage that the others do not possess. Along with this was A. longiflora and grandiflora, the smaller variety of Erica cubica, the well-known Stephanotus floribundus, Statice Dickensoni, Myoporum parvifolium, Chironia frutescens, and a collection of cut flowers of Verbenas.

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CARNATION AND PICOTEE SHOW AT THE COPPICE, NEAR NOTTINGHAM.—Mr. William Hepton, of York, won both cups, one for Picotees and one for Carnations. Mr. Lodge, of Manchester, took the second prize for Carnations, and Mr. Joseph Gibbens, of Bramcote, near Nottingham, the third. Mr. Thomas Gibbens, of Bramcote, near Nottingham, was awarded the second pan of Picotees; and Mr. Pearson, of Nottingham, the third. From what we could see, the Nottingham flowers were undersized, accounted for by the show being fixed too late for them; in fact we were informed that they were all second and third blooms. Mr. Hepton's flowers were certainly well grown; we particularly admired amongst his Picotees Ely's Field Marshal, which, though thin for the south, is a noble flower; Ely's Grace Darling, P.P., and Green's Queen Victoria. Rose Picotee, with Wood's Queen Victoria, R.P., were also *in first-rate style. In Mr. Thomas* Gibbens's pan, Nulli Secundus, P.P., and John's Prince Albert, P.P., were remarkably fine; and Wilson's Fanny Irby, R. P., and Robinson's Hero of Nottingham, were all that could be wished; whilst in Mr. Pearson's pan, Barnard's Mrs. Barnard was quite a gem. Of the Carnations, the lion of the day (or lioness if you like) was Ely's Lovely Ann; this was, indeed, the *ne plus ultra* of rose flakes, and excited universal admiration. Hepworth's True Briton was finely marked, though the flower was rather damaged; whilst those safe flowers, Ely's Mango, P.F.; Ely's Lady Ely, R. F.; Wilson's William the Fourth, F.; Greasley's Brougham, C.B.; and Ely's Jolly Dragoon, S.B., were (to use an old Derby-grower's expression) "toppers." For our own part we had a decided *penchant* for some of Mr. Lodge's flowers. His Royal Briton, S.B., was a first rate flower, and must be seen to be appreciated; Ely's Caxton, C.B., was rather thin, but beautifully marked; whilst Euclid and Beauty of Woodhouse were in extra condition, and Rob Roy and Beauty of Cradley, S.F., were as fine as could well be imagined. Amongst the losing pans were noticed the following in splendid condition.—Ely's Lord Milton, C.B.; Hufton's Patriarch, S.B.; Ely's Lady Gardiner, R.F.; Ely's Lord Morpeth, S.F.; Simpson's Marquis of Granby, S.F.; Pollard's First-Rate, P.F.; Martin's Splendid, S.B.; Brabbin's Squire Meynell, P.F.; Hufton's Rosea, R.F. We subjoin a list of the winning flowers: —*Carnations.*—1. Mr. W. Hepton, with Hepworth's True Briton, Ely's Jolly Dragoon, Hufton's Wellington, Greaseley's Lord Brougham, Wilson's William IV., Leighton's Prince George, Ely's Lady Ely, Ely's Lovely Ann, Ely's Mango, Leighton's Bellerophon. 2. Mr. Lodge, with Lodge's Royal Briton, Ely's Jolly Dragoon, Soorn's Bloomsbury, Ely's William Caxton, Mansley's Euclid, —— Beauty of Woodhouse, Orson's Rob Roy, Wallis's Beauty of Cradley, Ely's Lovely Ann, Ely's Lady Ely. 3. Mr. J. Gibbens, with Hufton's Patriarch, Hales's Prince Albert, Ely's Lord Milton, Greaseley's Lord Brougham, [illegible] Volunteer, Orson's Rob Roy, Pullen's Queen of England, Greaseley's Vil[illegible]ier, Squire's Meynell.—*Picotees.*—1. Mr. W. Hepton, [illegible] Grace Darling, Ely's Field Marshal, Ely's [illegible] Rose, Wood's Queen Victoria, [illegible] Mr. J. Gibbens, with [illegible] Prince Albert, Wilson's [illegible] Hunter, Booth- [illegible] Barnard, Fanny [illegible] Wellington, Remarks on the Leaves of Pelargoniums being spotted.—In several numbers of the last and present volume of the Floricultural Cabinet I have noticed attention has been called to the subject of the spotting of the leaves of Pelargoniums. I think this arises from the effects of green-fly. I, however, do not mean to assert that green-fly alone produces the spot; but this, in combination with other circumstances, causes it. One of these is the want of paying attention to regularity of watering: when water is injudiciously or sparingly supplied, the result is a sickly and half-dead plant, full of spot and green-fly. The Pelargonium requires to be regularly supplied with water when in a growing state; if the leaves are allowed to droop time after time, the cause will soon be shown by its effects. Immediately afterwards there appears upon the leaves a sort of sticky substance not unlike sugar, when dissolved and rubbed upon anything, which is injurious to the plant. In order to grow Pelargoniums to perfection, they should have a house wholly for themselves, which should be shaded with canvas, so as to exclude the mid-day sun. Air should be freely admitted, and the plants syringed every other night, when not in flower, with clean water; they should never be too much crowded together, but should be kept a good piece apart, so that air may circulate freely among them. By paying proper attention to these things there is no fear of the spot ever making its appearance. Particular attention should, however, be paid to having a free and open drainage, so that water may not stagnate about the roots. C.

On Salvia Mexicana.—For several years I grew this fine blue Salvia in a rich soil in the open ground against a south wall; it grew so vigorously, that I had but a very large foliage, and a few small spikes of flowers. By accident last year I kept an old plant in a pot rather confined, and to my surprise it bloomed most freely, having numerous spikes of large blossoms. This season I have grown several young plants, in 24-sized pots now, and they, too, are in beautiful bloom. Clericus.

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To Destroy Moss on Gravel-Walks.—In winter, when the frost operates upon the walk, by expansion the moss becomes loosened; at that time a rough beesom being applied liberally to the surface will remove all such, and clear the walk in a considerable degree. A Practical Man.

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On striking Cuttings in Charcoal.—All soft-wooded shrubby greenhouse plants, as Salvias, Pelargoniums, Petunias, Heliotropes, Fuchsias, Lantanas. Abutilons, Anagallises, &c., strike most admirably in a mixture of equal parts of loam and sifted (not mere dust) charcoal. The cuttings strike root to some extent in a week from the time put in, and when struck grow most vigorously, I place the pots of cuttings in a gentle heat till struck.

## NOTES ON NEW FLOWERS.

The raising of Seedling Flowers having much increased within the past two seasons, we have received a proportionate increase of floral specimens for our opinion of their merits. These have hitherto been inserted in Notes to Correspondents on the cover of our Magazine; but as the wrapper is thrown away when the volume is bound, the records of what has been submitted to us is no longer available for reference; and as it is now necessary, as a guide for the future, we therefore intend to devote a space in each future Number to a particular and faithful description of the specimens forwarded for our opinion.

### PELARGONIUMS.

ROGERS AND SON, W., NURSERYMEN, UTTOXETER.

No number attached; lively flesh-pink petals, having a small rich crimson-red eye, smooth in texture, being without crumple of any kind; a good circular-shaped flower.

## FUCHSIAS.

### BARKWAY, JAMES, EAST DEREHAM.

No. 6 is a good-shaped flower, with a purplish corolla, and very bright carmine tube and sepals.

No. 4 is large, of the colour of Racemiflora, than which, however, it is much better, but we do not like such loose-shaped flowers.

Nos. 1 and 3 are very pretty, both having delicate flesh-white tube and sepals, with lively rosy-ruby corollas. In shape they are almost too similar, although apparently distinct enough in foliage and habit; we recommend them both, as also No 2, which has deeper flesh-coloured tube and sepals, with a light purple corolla.

### LAWTON AND SONS, ETRURIA GARDENS.

Of your seedlings named Grandiflora elegans, Defiance, and Stylosa robusta, the last is the best, although inferior to several others of a similar habit, already out.

### ROGERS AND SONS, UTTOXETER.

$\frac{1}{44}$, veined, fleshy, straw-coloured tube and sepals, the latter tipped with bright grassy-green; the corolla bright rosy-vermillion; a well-shaped, distinct, and excellent variety. $\frac{2}{44}$, bright crimson tube and sepals, corolla bright rosy-purple; a good flower, but similar varieties have now become so numerous that it requires some particular quality in growth and habit to recommend such. $\frac{3}{44}$, this is rather lighter in colour than the last, and the sepals are tipped with green, in shape it is more distinct and of larger size, but not so compact as we like.

## HEPATICA.

### WILLISON, WILLIAM.

Your seedling named Autumnalis grandiflora, is much larger, and a good improvement upon the old purple; blooming, too, at such a season renders it very acceptable.

## HEARTSEASE.

### WILLISON, WILLIAM.

A very pretty sulphur, regularly laced with light blue; not good enough for a show flower, but may lead to something better.

## CALCEOLARIAS.

### STAFFORD, S., HYDE.

Your seedlings are most of them very pretty, the spots being varied and distinct, and their form well shaped. These are the best; Nos. 132, 46, 57, 145, 149, 7, and 157.

## FLORICULTURAL CALENDAR FOR SEPTEMBER.

Annual flower seeds, as Clarkia, Collinsia, Schizanthuses, Ten-week Stocks, &c., now sown in pots, and kept in a cool frame or greenhouse during winter, will be suitable for planting out in open borders next April. Such plants bloom early and fine, and their flowering season is generally closing when spring-sown plants are coming into bloom.

Carnation layers should immediately be potted off.

China Rose cuttings now strike very freely; buds may still be put in successfully.

Calceolaria seed should be sown soon, or be reserved till February.

Cuttings of stove plants, as Vincas Roellias, Justicias, Clerodendrons, should now be struck; they will make pretty plants for next season; as also sundry greenhouse plants.

DAHLIAS.—Where the laterals or buds are very numerous, they should be thinned out so as to have vigorous blooms. Towards the end of the month collect seed of the early-blown flowers.

Mignonette may now be sown in pots to bloom in winter.

Pelargoniums, cuttings of, may now be put off; plants of which will bloom in May. Seeds should be sown as early now as possible.

Pinks, pipings of, if struck, may be taken off and planted in the situations intended for blooming in next season.

Plants of Herbaceous Calceolarias should now be divided, taking off offsets and planting them in small pots.

Verbena Melindris (chamædrifolia). Runners of this plant should now be taken off, planting them in small pots half filled with potsherds, and the rest with good loamy soil, then placing them in a shady situation. It should be attended to as early in the month as convenient. When taken into a cool frame or greenhouse for winter protection, much of the success depends on being kept near the glass; or sink a box or two half filled with potsherds, and the other good loamy soil, round the plant, so that the runners, being pegged down to the soil, will soon take root at the joints. When a sufficient number are rooted, separate the stems from the parent plant, and those in the boxes will be well established, and, being removed before frost, are easily preserved in winter, as done with those in pots.

Plants of Chinese Chrysanthemums should be re-potted if necessary; for if done later the blossoms will be small. Use the richest soil. Pinch off the heads to cause the production of laterals, so as to have a head of flowers.

When Petunias, Heliotropium, Salvias, Pelargoniums, (Geraniums, Mesembryanthemums, Bouvardias,) &c., have been grown in open borders, and it is desirable to have bushy plants for the same purpose the next year, it is now the proper time to take off slips, and insert a number in a pot; afterwards place them in a hot-bed frame, or other situation having the command of heat. When struck root, they may be placed in a greenhouse or cool frame to preserve them from frost during winter. When divided and planted out in the ensuing May, in open borders of rich soil, the plants will be stocky, and bloom profusely.

Tigridia pavonia roots may generally be taken up about the end of the month.

Lisianthus Russellianus seed, sown immediately, will produce plants for next year's blooming. It is one of the finest plants grown. It is best treated as a stove biennial.

Plants of Pentstemons should be divided by taking off offsets, or increased by striking slips. They should be struck in heat.

The tops and slips of Pansies should now be cut off, and be inserted under a hand-glass, or where they can be shaded a little. They will root very freely and be good plants for next season.

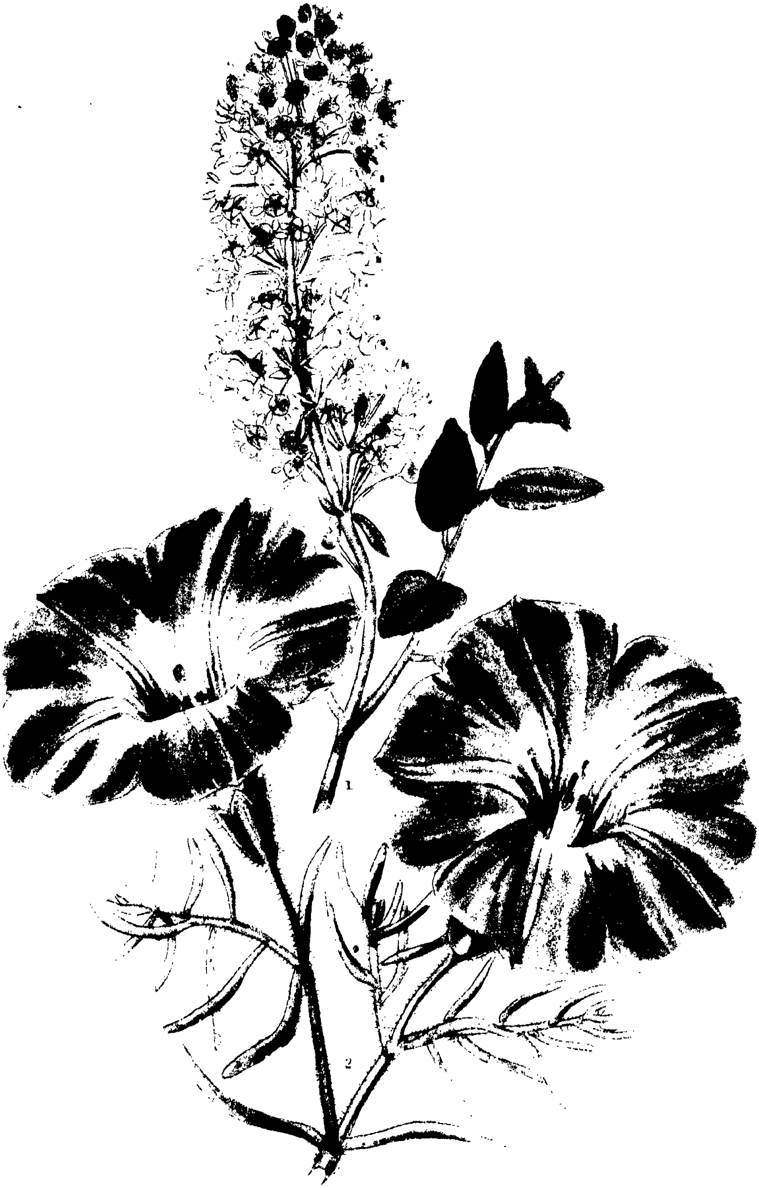
Lobelias.—Off-sets should be potted off, so as to have them well rooted before winter.

Greenhouse plants will generally require to be taken in by the end of the month; if allowed to remain out much longer, the foliage will often turn brown from the effects of cold air. The earlier succulents are the better.

Seeds of many kinds of flowers will be ripe for gathering this month.

When Lilies, Crown Imperials, Narcissuses, &c., require dividing, take them up now, and replant them immediately.

Ranunculus beds should now be prepared as follows:—The depth of soil to be two feet and a half, of a rich, clayey, friable loam, retentive of moisture; about six or eight inches from the surface to be a rich light loam, of a sandy nature. Remove the whole of the soil with the remains of the dung given last year, and turn up the subsoil a whole spade in depth, breaking it well. If the beds are allowed to remain in this state for a day or two, to sweeten the subsoil, it will be an advantage. Then place upon the sub-soil a layer of cow-dung, at least one year old, four inches thick; then scatter over it the fine powder of new-slaked lime, to correct any acidity, and destroy the worms. Then fill up with new, light soil, taken from the surface of the old tulip-bed or potato-ground, which has been frequently turned to sweeten it.



1. *Ceanothus thyrsiflorus.* 2. *Alona cælestis.*

# THE

# FLORICULTURAL CABINET,

OCTOBER 1st, 1844.

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## PART I.

## EMBELLISHMENTS.

### ARTICLE I.

### CEANOTHUS THYRSIFLORUS. Thyrse-bearing.

R. B. Hinds, Esq , as well as the late Mr. Douglas, discovered this plant; the former at San Francisco and Monteroy, the latter in California. The native specimens were objects of considerable beauty. We saw a plant of it growing against a wall in the garden of the London Horticultural Society in *very profuse bloom*, and affording a delightful appearance. It is a hardy evergreen shrub, the foliage being of a shining green. The flowers are produced in large branching panicles. It makes a charming plant to train against a wall or trellis; and there being so few blue flowers of this class of ornamental plants, renders this species still more valuable. It may be obtained at a reasonable price at most of the public nurseries, as the Horticultural Society have freely distributed plants.

### ALONA CŒLISTUS. The Sky-blue.

This new and beautiful flowering plant belongs to the Nolanas, and is included in the group of *shrubby* species. It is a native of Peru and Chile, and has been raised from seed by Mr. Best, gardener to A. Park, Esq., of Merton Grove, in Surrey, from whom we received a specimen.

The habit of the plant is somewhat of a Heath, much branching, and forms a good-sized bush. It blooms very freely, and produces a fine effect. The former kinds we possessed in this country, viz., Nolana prostrata, atriplicifolia, &c., are annuals. This, besides being equally beautiful in flowers, is a shrubby plant. It deserves a place in every greenhouse, and no doubt will be an ornamental one for the flower-bed during summer.

There are in Chile and Peru numerous kinds of the originally-named genus Nolana, many of them of great beauty, but varying greatly in structure and appearance; it has, therefore, been deemed best to divide them, and classify so as to form several genera, and for the present arranged as follows:—

NOLANAS (prostrate annuals).—N. prostrata, tenella, inflata, spathulata, and coronata.

ALONAS (shrubby, or half shrubby).—A. cœlestis, shrubby; A. rostrata, shrubby; A. obtusa, shrubby; A. glandulosa, shrubby; A. carnosa, shrubby; A. tomentosa, shrubby, having white flowers; A. revoluta, herbaceous, but at the lower part shrubby; A. baccata, an erect annual, flowers yellow; A. longifolia, annual, appears to be somewhat succulent.

DOLIAS (erect, shrubby, branching plants).—D. vermiculata and D. Salsoloides.

SOREMAS (flowers bell shaped, plant annual).—S. paradoxa, (synonym, N. paradoxa); S. atriplicifolia (synonym, N. atriplicifolia).

APLOCARYA (flowers bell shaped, plant shrubby).—A. divaricata, a stiff branching shrub, with small flowers.

What has hitherto been introduced into this country are pretty, and, when the entire of the above are obtained, they will be a valuable acquisition for the greenhouse, or open beds in summer.

## ARTICLE II.

## ON RAISING FUCHSIAS, AND TO FLOWER THEM THE SAME SEASON.

BY MR. SMEE, GARDENER, OF GOSFIELD HALL, IN ESSEX.

OBSERVING an article in this month's Number of your useful CABINET by an Amateur, requiring a few hints relative to raising and flowering Fuchsias in one season, I am induced herewith to communicate the mode of proceeding I have successfully adopted in raising and blooming seedlings of this beautiful and interesting tribe of plants.

On January 8th, after filling the pot with light garden mould, and making the surface even and smooth, I sowed the seeds, and thinly covered them with sand; after which I gave a slight sprinkling of water. I then placed the pot in 60 degrees of moist temperature. When the plants were about an inch high, I potted them off singly into forty-eight sized pots; and as the roots reached the sides of the pots the plants were repotted, entire, into twelves, in a compost of equal parts of sandy loam and leaf-mould. This being done, I had them replaced in the same temperature as before till June. In August they began to bloom, and now (September 10th) are so in profusion; the plants being about 25 inches high, with numerous branches near half a yard long.

## ARTICLE III.

### REMARKS ON THE LIME, OR LINDEN TREE.

BY FLORA.

——— " And the lime at dewy eve
Diffusing odours." COWPER.

(*Continued from page* 196.)

THERE is a prodigious linden now standing in the village of Prelly, in the canton of Vaud, in Switzerland, under whose shade the rural entertainments of these amiable and interesting people are held. Each village of this canton is governed by twelve men, who are chosen to maintain the observance of the laws; and it was beneath the extending branches of this celebrated tree that the municipality of Prelly formerly held their common council, seating themselves on the roots which have elevated themselves above the earth, as it were to form a natural bench for the justice of these simple people. This linden-tree is visited by all who make the tour of Switzerland, and many a traveller exclaims with Langhorne:

> " O let me still with simple nature live,
> My lowly field flowers on her altar lay,
> Enjoy the blessings that she meant to give,
> And calmly waste my inoffensive day ! "

We have already noticed that the linden was one of the papyraceous trees of the ancients. Munting affirms he saw a book made of the inner bark of this tree, which had been written about a thousand years; and there is a similar one in the library at Vienna, which contains a work of Cicero, *De Ordinanda Republica, et de inveniendis Orationum exordiis.* It was formerly amongst the varieties of Cardinal Mazarine, and which the Count of St. Amant, then governor of Arras (1662), procured for the emperor at the price of 8000 ducats, which, if silver ducats, would amount to 1800*l.*, and if gold, 3800*l.*

Pliny tells us that, in ancient times, fillets or ribands for chaplets were also made of the inner bark of the linden, and which it was esteemed a great honour to wear. The Romans also made cords and ropes from the thready substance which is found between the wood and the inner bark of this tree. The Roman cooks sliced the inner bark of the linden to boil with meats that were over salted, as it was found to make them perfectly fresh.

Of the ancient use of the timber of this tree, we learn from Virgil, who says :—

> "Of beech the plough-tail, and the bending yoke,
> Or softer linden, harden'd in the smoke."
> *Geor.* i.

It is from the wood of the linden tree, principally, that the incomparable carvings of Gibbons were formed, which, for lightness and elegance of design, have never been equalled in modern times, and perhaps not surpassed by the chisels of the ancients, as those beautiful festoons of fruits and flowers in Her Majesty's castle at Windsor, and those which ornament one of the noble apartments of the Earl of Egremont's mansion at Petworth, will evince, as well as those which decorate the choir of St. Paul's and other churches, and noble residences, both in London and in the country.

Architects make their models of this wood, and the carvers prefer it on account of its delicate colour, close grain, easy working, and for its not being liable to split. That it is not subject to worms must be satisfactorily proved by the preservation in which we now see the works of Gibbons, that have been exposed since the time of Charles the Second. It is also remarked by Pliny, that the worm never injured this timber. Evelyn tells us that this wood is preferable to the willow, being stronger yet lighter. We presume that it was from the strong recommendation of this tree in the Sylva, that it came so much into use in the latter time of that author, as about that time it was planted in St. James's Park; and we find it was also frequently planted in country towns, and trimmed up to screen the windows from the sun; for which purpose it was well adapted, both on account of the fragrance of its flowers and its shade, which is not required after the time the linden throws off its leaves; and few trees were found to bear clipping better than this, as it soon heals the wounds that are caused by the knife; and the branches are so tough that they seldom suffer by the wind, and were found to bear so great a weight that platforms were laid on them, and arbours made in the tree, one over the other. Dr. Turner says he had seen one in Germany with a table on it, around which ten men could sit. Parkinson also notices one which he had seen at Cobham in Kent, that formed three arbours over each other, "which was a goodly spectacle."

The leaves of this tree begin to open about the middle of April, and are generally fully expanded by the 20th of that month. The flowers begin to open by the middle of May, but are not in their full beauty before the middle of July. They are in some degree similar to those of hawthorn, but neither so white nor quite so large, and the flower-stalk is attached to a whitish tongue-shaped leaf. Their fragrance is agreeable to most people, and very attractive to the industrious swarm, for

——————— "the bee
Sits on the bloom, extracting liquid sweet
Deliciously."

But it is observed that no animal will eat the fruit or seed of the linden tree. Columella recommends the leaves as a good fodder for cattle.

A coarse cloth was formerly made of the inner thready bark, but it was more generally used for cordage, because it has the property of remaining in the water without rotting. The Greeks made bottles of the middle bark of the linden, which were lined with pitch to prevent leakage.

It is said that no wood chars better than this for the purpose of gunpowder. It is also turned into bowls and dishes, and little pill-boxes were made of it before those of paper were invented.

The flowers were formerly held in esteem by the apothecaries, being accounted cephalic and nervine, and good for the apoplexy, epilepsy, and palpitation of the heart, &c. They were sometimes added to the spirits of lavender, and they formed the *aqua florum tiliæ* of the last age. The berries, reduced to powder, were used in dysenteries, and the bleeding at the nose. Hoffman speaks in high terms of the infusion of the flowers in water, after the manner of tea, by which he says he has known an inveterate epilepsy perfectly cured.

Notwithstanding the rules of fashion, we shall always be glad to meet the linden tree in our summer walks or rides, whether it spring from the hedge-row, the enclosed park, the open street, or from the boundary of the shrubbery, where we hope the sight of it will remind the young orator of the eloquence of him whose works we have already noticed are preserved on its bark.

In humbler situations we would have this tree give the artist emulation to excel the hitherto unsurpassed Gibbons.

So great was the honour thought of planting a linden tree on the Continent, during the confederacy, that as soon as one party had made themselves masters of a village, they planted a linden in the public place, destroying those which their adversaries had set, and which was again hewed and another planted as often as victory decided in favour of a fresh party.

The finest linden trees are those that are raised from seed, which should be sown in the autumn, as soon as they are ripe, and covered with mould about three quarters of an inch deep. They are also propagated by layers, which in one year will make a good root: these should be laid down and transplanted about Michaelmas. The linden is also increased by cuttings; but the tree seldom forms so fine a cone-like shape when propagated by either of the latter methods as when raised from seed.

## ARTICLE IV.

## REMARKS ON THE MAGNOLIA.

> 'Columbus shew'd
> The western world to man."

The discovery of America may be considered one of the most important events that has been recorded. It has discovered to us an immense territory of land; a people whose habits and minds wer new to us; it exhibited unknown animals, and afforded us vegetables no less novel than numerous. It has had the effect of a new creation; new wants nave arisen, and new inventions have sprung up to gratify them.

> "Then commerce brought into the public walk
> The busy merchant; the big warehouse built,
> Raised the strong crane, choak'd up the loaded street
> With foreign plenty; and thy stream, O Thames!
> Large, gentle, deep, majestic, king of floods!
> Chose for his grand resort." THOMSON.

The shrubs of the new world have been transplanted into our gardens, and the forest trees of America rear their heads in our woods; whilst, in return, we have planted colonies on the newly-discovered shores, who have reared their national constitution and laws with such care, that it may probably be found thriving there in its purity when time and corruption shall have destroyed the parent trunk.

The magnolia grandiflora, or laurel-leaved magnolia, is a native of that part of America which has been named Florida, from the beautiful plants with which it abounds; and when growing in its native soil, the magnolia is esteemed the most beautiful tree known; it reaches from 90 to 100 feet in height, and is clothed with an evergreen leaf of the most lucid colour on the upper surface, and of a russet tint beneath. The shape is nearly that of the common laurel leaf, but much larger; and being agreeably waved on the edge, it has not the heavy and stiff appearance of the laurel leaf, although the consistency is the same. It is sessile, and placed without order on every side of the branches. The flowers appear from June to September, during which time they perfume the air for a considerable distance round with the most agreeable odour, which at one moment reminds us of the jasmine or lily of the valley, and the next, of the violet mixed with the apricot.

During the last summer we saw a fine tree of this description in the exotic gardens of M. Bourseau, Rue Mont Blanc, in Paris, which scented the whole of that elegant plantation.

We have also seen a most noble magnolia in the grounds of the Priory, near Ryde, in the Isle of Wight; and which, we were then told, often wafted its delightful fragrance to more than a half a mile in distance. The flowers are produced at the ends of the branches, and are so large as to measure from seven to eight inches in diameter, and are composed of eight or ten petals, narrow at their base, but broad, rounded, and a little waved. They spread open like a tulip, and have the appearance of white kid leather more than of a vegetable substance. In its native country this tree begins to flower in May, and gives out a succession during the whole summer, so that the woods are constantly perfumed with its odour. The pencil can give but a faint idea of the splendour of this beautiful tree, which defies the pen altogether to describe its charms; its leaves are more glossy than those of the laurel, and from nine to ten inches in length, and about three inches in breadth, with a softness on the underside, that gives great variety to the foliage. The young branches are of a fine purplish brown, and when each spray, for a hundred feet in height, is holding up its petaled vase, as if to offer incense to the sun that nourishes its fruit, a mass of beauty is composed, that rivals the proudest work of man.

The fruit of the magnolia is seated in the flower in a manner similar to the strawberry, which afterwards becomes a strobile or cone, composed of many capsules, each of which, when perfect, contains two scarlet seeds. We are not aware that the fruit has ever matured its seed in this country, though we have seen some old plants that have formed strobiles of considerable size.

This splendid plant received the title of magnolia from Plumier, who so named it in honour of Pierre Magnol, prefect of the botanic garden at Montpelier, and author of several works on plants.

Sir John Colliton is thought to have reared the first plant of this kind in England, at Exmouth, in Devonshire, some time prior to 1737. It was unknown to Mr. Miller, in 1724, when he published the first edition of his Gardener's and Florist's Dictionary; but in a later edition, he mentions that there were a great many plants in England before the year 1739, but the severe winter of that year destroyed most of the young ones. He also tells us, that he had a pretty large plant which was apparently killed by the severe winter of 1739–40, but that he cut it down after Midsummer, and that it shot up again the year following. We notice this circumstance more particularly, because in case of similar accidents, gardeners may not be too hasty in grubbing up the roots. The magnolia is generally injured most by the early frost, as the extremities of the young shoots are then tender.

His Grace the Duke of Richmond has two of the finest standard magnolia grandiflora trees in this country, at his seat at Goodwood in Sussex, one of which, at six inches from the ground, girths four feet, and at four feet from the ground, three feet five inches; at about five feet from the earth it divides into branches, forming a very beautiful head about thirty feet in height. The other is forty-five feet in height, and measures five feet in circumference at fourteen inches from the ground: these trees flower abundantly every year. The time of their having been planted cannot be now correctly ascertained.

The Magnolia should occupy a situation sheltered from the north and north-east winds, but fully exposed to the south or south-west sun. It seems to thrive in the sea air, when the situation is not exposed; and the soil congenial to this tree is a deep rich loam, rather dry than moist.

From the noble appearance and extreme beauty of this tree, we think it deserving of more care than is generally bestowed on it, so as to secure it from the frost, and which might easily be done by placing blocks of wood in the earth, with mortices in them, into which poles might be fixed, and a frame or wirework thrown over, to lay mats or other covering on during the inclement nights. Tall evergreens, of the darkest foliage, form the most proper back ground for this tree.

Our nurserymen frequently raise these trees from seeds, which are sown in pots, and plunged into old hotbeds of tanners' bark. They are seldom strong enough to be planted in the open ground under six years; therefore gardeners are justly entitled to a considerable price for a plant that has required so much of their attention in its propagation. The magnolia may also be raised from layers and cuttings; but these seldom make handsome standard trees.

We have now about forty species and varieties of this plant, most of which are natives of North America, and nine belong to India, China, or Japan, and others raised by hybridizing in this country, France, &c., and should we be able to naturalize them so as to endure our winters in the open air, as the common tulip tree has been made to do, they cannot fail of being regarded as one of the greatest ornaments of the shrubbery.

The swamp Magnolia glauca, was the species of this plant first cultivated in England, as it is mentioned by Ray, in 1688, as being amongst the rare exotic trees and shrubs then growing in the episcopal garden at Fulham, where it was sent by Banister to Bishop Compton. This shrub seldom exceeds sixteen feet in height in its native soil; it is found in low, moist, or swampy ground in North America, but not more northerly than Pennsylvania. The perfume of this plant resembles that of the lily of the valley, with a mixture of aromatic odour; and its fragrance is so great, that the trees may be discovered at the distance of three quarters of a mile by the scent of the blossoms, particularly towards the close of day, when it is, we are told, beyond description pleasant to travel in the woods at the season of their flowering. The tree is known in America by the name of White Laurel, Swamp Sassafras; but it is more generally called the Beaver› tree, because the root is eaten as the most favourite food of the beaver, and it is therefore employed to catch these animals. The flowers of this speies of magnolia are similar to those of the grandiflora. They consist of eight petals, but are not more than three or four inches over. The bark of the swamp magnolia, as well as the fruit and the young wood, form one of the American domestic medicines.

## ARTICLE V.

### CHARCOAL *versus* BONE-DUST.

BY BRITANNIA.

At a late meeting of the Horticultural Society of London, the result of a trial of charcoal *versus* bone-dust, as applied to Fuchsias, was produced in the form of two plants of F. Chevallierii. They were struck from cuttings in one pot, and were potted off on the 15th February. A thumb-pot, full of bone-dust, was mixed with the soil in which one was potted; the other received the same quantity of charcoal. Each was potted in a 48-size pot. For a few weeks the only perceivable difference was, that the one in bone-dust had leaves of a much darker colour than the other. Both were re-potted, on April 26th, into a 16-size pot and a 60-size pot, a pot of bone-dust being given to the one, and of charcoal to the other, in the same way as before. Both plants had grown so much alike that it was hardly possible to say which was best; and thus it appeared that, good as bone-dust is, it is equalled by charcoal in the treatment of Fuchsias for specimen plants.

August 12th, 1844.

## ARTICLE VI.

## OBSERVATIONS ON RAISING PLANTS FROM SEEDS FORWARDED TO THIS COUNTRY FROM THE CAPE OF GOOD HOPE AND NEW HOLLAND.

BY THE FOREMAN OF A LONDON NURSERY.

Aware of the circumstance that numerous packets of seeds are sent from the Cape of Good Hope and New Holland to friends in this country, and having had several years' experience in sowing the seeds, raising plants, &c., of many importations to the establishment in which I am employed, I presume that a few particulars relative to the practice I have adopted, &c., will be serviceable to a portion at least of the readers of the Floricultural Cabinet, and therefore forward them for insertion.

Seeds of the Cape species of Acacia, and other South African Leguminosæ, I find succeed better by having water heated to 200°, of Fahrenheit's thermometer, poured over them, leaving them to steep and the water to cool for twenty-four hours. Where there is a numerous collection, and the quantity small, of each species, they remain in the papers.

The soil in which to sow leguminous seeds in general, should be one part sandy loam, and three parts thoroughly decayed leaves. The common, or wide-mouth, 48-sized pots are the best for sowing the seeds in, as they allow sufficient room for draining, and contain enough earth for the short time that may expire before planting out, and the soil in them maintains a more equal degree of moisture than in pots of a larger or smaller size: an essential circumstance to the growth of seeds of every description.

The Cape species of Leguminosæ may be sown at any time of the year they may arrive in Europe: if this should happen to be in the autumn or winter, the growth of the plants should not be forced, as such practice tends only to produce weak plants, which rarely survive till the spring. The front stage or upper shelves in the greenhouse will be found the best situation for placing autumn or winter sowings: but, taking the months of February, March, and April, as the best and most convenient season for sowing those seeds, the following practice will insure to the European cultivator many species which have hitherto failed, continued scarce, or which have only exhibited poor and stunted specimens, and which, consequently, have been treated with neglect, when, under proper management, they would form suitable and splendid ornaments for the shrubbery, and make more room in the conservatory for less hardy species.

Having sown the seeds (after steeping as above,) and covered them with earth from a quarter to a half inch deep, and leaving a space for water of half an inch from the edge of the pot, they must be well watered, and placed in a declining or exhausted hot-bed, not plunging them. If the season is so far advanced that the sun's rays are powerful, the frames should be shaded from its direct influence during the middle of the day. In the earlier stages water need only be applied every third day; or, at least, so often that, without stagnating, the soil is kept constantly moist; alternate drought and superabundant moisture retard and check the progress of vegetation.

As the various species make their appearance, and the cotyledons become fully developed, the pots containing them should be separated from the rest, and placed in other frames, where they will require a more constant supply of water and admission of air, duly encouraging their growth until of a sufficient size for planting out. In this, the experience of the cultivator must guide him; but it is necessary to observe, that the first planting out should be accomplished while the plants are in a progressive state of growth, shading them if necessary.

In large establishments, the person intrusted with the management of the seeds is, or at least ought to be, a confidential person, and therefore ought to be put in possession of the lists, and any other written observations which may accompany packets of seeds from abroad. By these, he is enabled to allot to each species the peculiar earth required, of which he must be sometimes ignorant, when he meets with species new to him.

Whatever soil may be required for the plants, care must be taken not to pulverise it too finely by sifting ; for the tap root in its descent, on meeting with any obstruction in its perpendicular direction, receives an impulse approaching to animal instinct, and, rounding the impediment, forms sooner its lateral fibres and roots, which are to become organs of nourishment for the future tree, &c. This will not be generally the case with plants placed in earth sifted as fine as snuff; their state of health is shown by the sickly hue of the leaves, which prematurely fall off; and, upon examination, the root will be found embedded, as it were, in a condensed cement, which all the efforts of nature cannot penetrate.

As soon as the young plants are established in the pots, they must be removed from the frames, and plunged in prepared beds of decayed bark, formed at or under the level of the natural ground; and occasionally supplied with water until the middle or latter end of August, when they are to be raised and the tap root cut off, if it should have passed the aperture at the bottom of the pot. They may remain above ground until housed for the winter, during which season as much air and as little fire heat as possible should be administered. In a general collection, it is impossible to allow every species its proper atmospherical temperature, but long confined air and damp are as injurious to vegetable as they are to animal life. There are generally some bright days occurring during the winter season : those opportunities should be embraced to purify the houses by throwing open the doors and sashes, and keeping up a brisk fire in the morning, as often as may be judged necessary.

There are few Cape plants but what will resist the effects of some degrees of frost; the Plectranthus fruticosus, a native of the Cape forests, is the most susceptible of injury from cold, and, if properly placed in the house, proves a warning thermometer against direct injury, as it is the first to suffer, and consequently show the increasing harm.

Of the South African Leguminosæ, the following genera form striking and beautiful ornaments in their native wilds, particularly to those who are charmed with the outward appearance and varied colours of flowers: and although the nature of the native soil where they are found to abound may be variable, a sandy loam with decayed leaves is the most genial to the growth of most species of Cape Leguminosæ, and may therefore be used in general collections.

Omphalobium, Schotia, Sophora sylvatica, Cyclopia, Sarcophyllum, Borbonia, Crotalaria, Cytisus, Anthyllis, Sutherlandia, Indigofera, and Aspalathus generally indicate the existence of a red sandy loam.

Acacia, Virgilia, Loddigesia, Viborgia, Rafnia, Psoralea, Ononis, and Cylista thrive with greater luxuriance on the margins of streams, in alluvial and vegetable soils: but many species of the same and of other genera vary from the general rules, and are found either in pure sand or in stiff clay, exposed through great part of the year to excessive heat and drought, or but slightly sheltered and nurtured by the mountains; but deriving much of their subsistence from the dewy clouds which those heights, as these clouds pass over them, arrest and condense. So readily do South African plants appear to accommodate themselves to soils and situations, that it is difficult to positively recommend any particular compost for them in garden culture: practical experience must alone decide the best for the purpose.

## ARTICLE VII.

### REMARKS ON FORCING HYACINTHS,

BY CLERICUS.

For many years it has been a favourite object with me to have a fine bloom of forced Hyacinths, both in glasses and pots, and now the season for commencing operations having arrived, induces me to note down a few particulars, which I have attended to, and as the result, I have never failed to have a most brilliant display of these lovely flowers, affording me their varied beauties and fragrance, as additional charms to domestic comforts, at a season of the year which often precludes similar out-door enjoyments.

### Hyacinths in Glasses.

In selecting bulbs take the plump and firm ones, the more globular the better, being the most perfect.

The bulbs should be placed in *dark coloured glasses*, filling them, no higher with water than about an inch from the bulb, wrap the glass and bulb closely round with a piece of old flannel, they must then be put in a moderately warm closet or other dark place for two or three weeks, by which time they will have emitted roots, and should be removed to an airy, light, and cool situation till about Christmas, when they may be brought into the warm sitting-room and placed near the windows.* Rain or river water is to be preferred, and should be changed every two or three weeks, the fresh water being applied about the same temperature as that removed. Should the water in either of the glasses become foul sooner than the others, the roots and the under part of the bulb will generally be found covered with a decayed substance, which should be removed and the whole plant washed. Should off-sets appear round the bulb they should be removed early. As soon as the Hyacinths are overblown, the blossoms should be stripped off without destroying the leaves or stem, and the plant laid in the earth until June, when they may be taken out and laid up on shelves or boxes in an airy situation until October, when, though not fit for blooming a second season in water, they will produce fine blossoms in the open ground, and by thus saving annually the bulbs which have been forced and their numerous off-sets, a beautiful Hyacinth bed of every shade and colour may soon be obtained, which is one of the most pleasing objects in the months of April and May. I repeat that the errors too often observable in growing Hyacinths in water are,—placing them in the *full light* when *first* planted, which is very unfavourable to the growth of the roots—keeping them away *from the light* when throwing up the leaves and blossoms, which prevents their coming to their natural colours—placing them (before the leaves and stems are sufficiently advanced) upon a chimney piece or other very warm place, which spends too much of the bulb in fibrous roots, and forces up the blossoms before they arrive at their proper size, form, or colour.

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* The attention to placing them in the dark arises from the fact, that where light has free access, leaves will immediately be produced, as it is congenial to their nature; but it is the opposite with roots, and where full light exists they will not push forward. Kept in the dark roots push freely, and having obtained them first, leaves and flowers will certainly follow. When they are removed to a light situation the glasses may be filled up to the tips of the roots, and in a week afterwards up to the bulb.

### OF HYACINTHS, DWARF TULIPS, &c., IN POTS.

Hyacinths, Narcissuses, Jonquils, Tulips, Persian Irises, and other bulbs for early blooming in pots, (without any hot-beds or greenhouse,) should be planted early in October, for which purpose deep-shaped flower-pots should be procured, called bulb pots, placing crocks or coarse gravel at bottom for drainage, and be filled to within two inches of the top with rich loam, containing a portion of fine road sand and decayed manure; then place the bulb on the same without pressure in so doing, and fill to the top with the same compost, after which a little pressure should be used, which will settle the bulb and mould firmly together with the top of the bulb just above the surface of the soil.

When the desired number of roots have been thus potted, they should be removed to any spare corner of the garden, and buried to the top of the pots in the earth, when they must be covered *with leaves*, rotten tanner's bark, or any other light dry substances to the depth of *nine or ten inches*, where they may remain without any attention until the plants will be found to have vegetated an inch or two; they should then be removed, and placed in any warm and light situation, where they will make rapid progress, and produce blossoms far superior to those obtained by other modes of treatment.

# PART II.

## LIST OF NEW AND RARE PLANTS.

**ACACIA ROTUNDIFOLIA. ROUND-LEAVED.** (Bot. Mag. 4041.) Leguminosæ. Polygamia Monæcia. A native of New Holland, from whence it was sent by James Backhouse, Esq., of York Nursery. It bloomed last spring in the greenhouse of the Royal Botanic Gardens at Kew. It is a straggling shrubby plant, and when trained to a trellis, its graceful drooping branches and copious profusion of blossoms, having far more heads of flowers than leaves, produces an elegant appearance. It forms a shrub three or four feet high, and well deserves a place in every greenhouse.

**ASTIRIA ROSEA. PINK ASTIRIA.** (Bot. Reg. 49.) Buttneriaceæ. Monadelphia Pentagynia. From the Mauritius. It has bloomed in the collection at Sion Gardens during the last spring. The plant forms a fine tree in its native country; it has a noble heart-shaped foliage. The flowers are produced in a short axillary peduncle, forming a cymous head, of about twenty flowers. Each blossom is about an inch across, of a pretty blush colour, with a deeper tinge at the centre.

**CLERODENDRUM INFORTUNATUM. UNFORTUNATE CLERODENDRUM.** (Pax. Mag. Bot.) We noticed this fine plant in a recent number, and recur to it now, consequence of its deserving a place in every hot-house. It delights in a *moist stove-heat*, and to have a liberal supply of water. The plant strikes freely from cuttings, grows rapidly, and will bloom profusely when not more than a foot high. The plant is an evergreen, and the flowers are produced in large panicled heads, of a rich crimson scarlet. It was sent from Ceylon to this country

CORETHASTYLIS BRACTEATA. ROSY-ARMED. (Bot. Reg. 47.) Lasiopetaleæ. Pentandria Monogynia. It is a greenhouse *shrub*, a native of the Swan River Colony, and is in the collection of Mr. Groom, of the Clapham Nursery, near London. The coloured bracts form the beauty of the plant; they are produced profusely, forming a large cymous head, composed of numerous racemes of the coloured bracts; they are of pretty rose colour having a crimson centre. Each bloom, in its native growth, is half an inch across. It is a very pretty and interesting plant, well deserving a place in every greenhouse. It has a sweet scented foliage.

EPIDENDRUM RADIATUM. RAY-FLOWERED. (Bot. Reg. 45.) Orchidaceæ. Gynandria Monandria. Sent from Mexico to the garden of the London Horticultural Society. The flowers are produced in a dense raceme, of six or eight in each. A separate blossom is about an inch and a half across, sepals and petals white, stained with greenish-yellow. Labellum white, streaked with purple.

EUCALYPTUS SPLACHNICARPON. SPLACHNUM-FRUITED. (Bot. Mag. 4036.) Myrtaceæ. Icosandria Monogynia. A native of South Australia, where the plant attains to a noble tree. In this country it forms, in the greenhouse, a tree about five yards high. The flowers are large, produced in noble terminal heads. Each blossom, composed of the thread-like stamens an inch long, forming a yellowish globose head.

GASTROLOBIUM SPINOSUM. SPINOUS-LEAVED. (Pax. Mag. Bot.) Leguminosæ. Decandria Monogynia. Seeds of this very beautiful flowering plant were imported from the Swan River Colony to this country by Captain James Mangles, R.N., and by that truly generous gentleman distributed liberally. It has received, in some of the London nurseries, the name of Chorozema oppositifolia, but it is a Gastrolobium. The leaves have much the appearance of a Chorozema. It is an evergreen shrub. The flowers are produced profusely in *terminal* clusters, each lateral shoot having one. They are of a rich orange, having a bright yellow eye surrounded with red. The keel is of a deep orange, with reddish purple wings. The plant was first raised in this country by Mr. Young, of the Epsom Nursery. It deserves to be in every greenhouse.

GASTROLOBIUM ACUTUM. SHARP-LEAVED. (Bot. Mag. 4040). Leguminosæ. Decandria Monogynia. Mr. Drummond sent seeds of this pretty flowering plant from the Swan River Colony to the Royal Gardens at Kew. It is a greenhouse shrub, growing about two feet high, with numerous angular stalked branches. The flowers are produced numerously in short racemes. The standard is of a rich yellow, and red at the base. The wings yellow, the keel yellow, with the upper portion red. It deserves a place in every greenhouse.

GLOXINIA SPECIOSA. GARDEN VARIETIES. (Bot. Reg. 48.) Four varieties were recently raised by Mr. Carton, gardener to the Duke of Northumberland, at Sion, and distinguished as G. magnifica, pale rosy pink, with a streak of yellow inside the tube. G. insignis, tube rose, and a portion of the two upper divisions of the limb is rose, margined with white; the three lower divisions nearly wholly white; there is a streak of greenish yellow down the inside of the tube. G. bicolor, pale blue, with a yellow streak down the inside of the tube, and a whitish margin to the two upper divisions of the limb. G. cartoni, tube deep rosy-red, with a white and greenish yellow down the inside.

ISOPOGON SCABER. ROUGH-LEAVED. (Bot. Mag. 4037.) Proteaceæ. Tetrandria Monogynia. Mr. Drummond sent seeds of this plant from the Swan River Colony to the Royal Gardens at Kew, where it recently bloomed. The heads of the flowers are about two inches in diameter, of a pretty rose colour, with some of deep purple.

BICOLOR. Two-coloured. (Bot. Reg. 50). Orchidaceæ. Gynandria Monandria. From Guatemala; by Mr. Hartweg found at an elevation of 7000 feet above the level of the sea. The habit of the plant is much like that of the Peristerias, having pendulous racemes of flowers, ten to twelve in each. Petals and sepals yellowish-green, with white margins. Labellum of the same colour, with a large dark blotch, and a few spots of the same. The under side of the lip is of a purplish-blue.

OTHONNA TUBEROSA. TUBEROUS ROOTED. (Bot. Mag. 4038.) Compositæ. Syngenesia Necessariæ. From the Cape to the Royal Gardens at Kew. The root is much like that of a Cyclamen, having a short neck, from whence proceed three or four stems six or eight inches high. Each flower is produced solitary; terminal yellow, near two inches across. It is a showy little plant.

RHIPSALIS BRACHIATA. OPPOSITE-BRANCHED. (Bot. Mag. 4039.) Cacteæ. Icosandria Monogynia. From Buenos Ayres to the Glasnevin Botanic Garden, Dublin. Small plants bloom profusely, each blossom being about three quarters of an inch across, of a greenish-yellow.

SALVIA PRUNELLOIDES. PRUNELLA-LIKE SAGE. (Pax. Mag. Bot.) Labiatæ. Decandria Monogynia. From Mexico. It has been found perfectly hardy in this country. The plant spreads by means of underground stems, which develop shoots rapidly that speedily rise [to the height of eight or ten inches. The foliage is not coarse, and a leaf is about two inches long by one broad. The stems are produced closely but not crowded. The flowers are produced in whorls, forming racemous spikes. Each blossom is about three quarters of an inch long, of a bright blue. It is a very pretty dwarf plant, suited for a bed, or border, in the flower-garden, and well merits a place in every one. It may be had of the general nurserymen.

# PART III.

## MISCELLANEOUS INTELLIGENCE.

### QUERIES.

ON HEATING A GREENHOUSE.—Your reply to a Correspondent, who subscribes himself a "Suburban Novice," in your last Number, on the subject of heating a greenhouse, is very generally interesting. But allow me to hope that in your next you will oblige us with some detail a little more practical and explanatory. A slight sketch of the apparatus would be very desirable.

I believe I am right in supposing, that if the hot water-pipes are introduced into the greenhouse, the fire may be at any distance (YES), and that it is not necessary that the water in them should be kept actually boiling (CERTAINLY NOT). Now, if this be correct, would it not be possible to contrive a cheap moveable apparatus, which might be removed when not in use. It might consist of a small boiler (or pot) of tin or zinc, having horizontal pipes, and so constructed that a small flame placed beneath it might be sufficient to keep the water at a temperature approaching to boiling, without the necessity of resorting to all the trouble and expense of bricklayers in setting boilers in brickwork, and constructing expensive flues, &c. As the temperature required in winter would be only just sufficient to keep out frost, would you kindly enter into particulars as to how this can be most readily effected by those novices who do not keep a regular gardener, but who are content to enjoy their greenhouse plants most effectually by waiting upon themselves. I like this kind of independence, and therefore I ask the favour of you to describe in your next Number (for the season is rapidly advancing) how this may best be done.

I earnestly hope that the occasional notices upon this subject, promised by your Correspondent in the number of the CABINET for February last, p. 33, will not be omitted.

W. S. A.

[We will attend to the matter in our next, and we hope our Correspondent, p. 33, will favour us as desired by W. S. A.—CONDUCTOR.]

**On Whitney's Composition.**—Having observed in the May number of this year, p. 118, that Whitney's Composition is strongly recommended in lieu of glass, could you inform me if the cotton prepared as therein stated can be procured in London, or could the recipe be procured.

London, August 15. A Subscriber.

[Early in the present summer we erected a house, the roof of small sashes, for the summer department of the finest Fuchsias, and used fine glazed calico, giving it two coats of the composition. We found it answer well for a few weeks, there was desired protection, and whilst the prepared calico gave a sufficiency of light it afforded a very good shade from powerful sun. Shortly, however, we found the leaves of the Fuchsias began to blister and turn brown, eventually dropping rapidly off, and the plants assumed a very sickly appearance. In the day time we had abundance of air admitted, but closed the roof during night. It was evident that the liquid used contained what most injuriously impregnated the air, and thus damaged the Fuchsias. At the end of July we had a storm of rain and wind, and this rent up the covering as if it had been paper. On examination we found that the calico had become so tender as not to be able to bear the least pull or pressure. A small portion of the calico had had but one coat of the composition, this was in far better condition than that which had two coats applied.

We had some pit-lights, which had been constructed for glass, covered with the prepared calico, under which were small Dahlias in pots; these were not injured by it, and the sash-bars prevented the wind moving the calico; it has in that instance done well, but the sashes were not used more than two months. Other persons have used it with cucumber sashes, and it answered well, the plants being healthy and very fruitful. A stronger material than glazed calico should be used, and numerous cross supports. It will be found, too, that some kinds of plants will not bear the effects of the composition which is transfused into the air.

The composition may be obtained of Mr. Whitney, of Shrewsbury, in bottles of *2s. 6d.* or *3s. 6d.* each. It is applied over the calico, &c., by means of a painter's brush, stretching it and securing it over the sashes when in a wet state, so that when it dries it is quite tight. It soon dries and is readily prepared for use. Any draper will be able to supply a better article than the glazed calico, some fine but STRONG material.—Conductor.]

## REMARKS.

## ROYAL SOUTH LONDON HORTICULTURAL SOCIETY'S MEETING,

### Held in the Surrey Zoological Gardens.

The show of *Picotees* and *Carnations* was upon an extensive scale, the number of competitors being very numerous, and the flowers in excellent condition. The tent devoted to this part of the Exhibition was crowded during the day, and the display of these beautiful flowers appeared to afford universal gratification. The Silver Cup, offered by Mr. J. Dickson for 12 white ground Picotees, to be contested for among the amateur members of the Society, was awarded to T. Barnard, Esq., for a remarkably fine stand of flowers, consisting of the following sorts:—Ely's Great Western, Sharp's Duke of Wellington, Ely's Favourite, Brinkler's Lady Emily, Wain's Victoria, Wildman's Isabella, Burrough's Lady Douro, Sharp's Gem, Green's Queen Victoria, Jessop's Sir W. Middleton, Wilson's Pluperfect, and Barnard's Mrs. Barnard.

To Amateurs, Members of the Society, the Gold Medal was awarded to Mr. Edmonds for 12 blooms of white ground Picotees; this stand, which was very fine, consisted of Willmer's Princess Royal, Nulli Secundus, Jessop's Sir W. Middleton, Orson's Adelaide, Green's Queen, Barraud's Cornelius, Ely's Grace Darling, Headley's Nannette, Gidden's Princess Royal and Teazer, Crask's Queen Victoria, and Brinkler's Purple Perfection.—Large Silver Medal to the Rev. A. H. Matthews, who showed Dickson's Trip to Cambridge, Crask's Queen Victoria, Lady Alice Peel (seedling), Enchantress, Ne plus Ultra, and Regina (seedlings also), Brinkler's Purple Perfection, Nulli Secundus, La Elegante, Sir R. Peel, and Lady de Grey.—Middle Silver Medal was awarded to — Proctor, jun., Bermondsey; to this collection no names were attached.—Small Silver Medal to Mr. George Leach for Burrough's Mrs. Bevan, Wilson's Pluperfect, Wain's Queen Victoria, Masson's Charlotte, Wilson's Harry, Willmer's Princess Royal, Barraud's Cornelius, Burrough's Lady Flower, Crask's Queen Victoria, Princess Augusta of Cambridge, Lady Payne, Miss Desborough.—For the best 12 blooms of Carnations the Large Silver Medal was awarded to R. Headley, Esq., no names attached. 2d. to Mr. Trevors, jun., the Middle Silver Medal, no names attached. For Heartsease in stands of 24 varieties, Middle Silver Medal, Mr. J. Hunt; Small Silver ditto, Mr. W. Hall.

Among Gentlemen's Gardeners, for 12 blooms of Carnations, the Middle Silver Medal was awarded to Mr. Embleton, gardener to T. Barnard, Esq. This stand contained the following varieties:—Datton's Lancashire Lass, Hale's Prince Albert, Wilson's Harriet, Queen of Sheba, Greig's Mary, Barnard's Duke of Roxburgh, Martin's President, Roi Dagobert, Lord Pollington, Ely's Lady Ely, Willmer's Conquering Hero, Pucelle d'Orleans. 2d. the Small Silver Medal to Mr. Atterton (no names.) For 12 blooms of white ground Picotees, 1st. Middle Silver Medal to Mr. Welch, gardener to G. Edmonds, Esq., for Kirtland's Wellington, Willmer's Princess Royal, Jessop's Sir W. Middleton, Barnard's Mrs. Barnard, Orson's Adelaide, Ely's Grace Darling, Green's Queen Victoria, Gidden's Princess Royal, Brinkler's Hope, Burrough's Lady Flower, Wood's Mrs. Vesey, and Sharp's Wellington. For the 2d best stand, the Small Silver Medal was awarded to Mr. Embleton, gardener to T. Barnard, Esq.—Sharp's Duke of Wellington, Green's Queen Victoria, Nulli Secundus, Jessop's Sir W. Middleton, Wilson's Pluperfect, Wain's Queen Victoria, Willmer's Princess Royal, Wildman's Isabella, Ely's Grace Darling, Dickson's Trip to Cambridge, Crask's Queen Victoria, and Barnard's Mrs. Barnard.

Among Nurserymen and Florists, for 12 blooms of Carnations, the 1st Prize, Large Silver Medal, was awarded to Mr. Willmer, for Willmer's Conquering Hero, Prince of Wales, Duke of Northumberland, Hufton's Lord Wellington, Addenbrook's Lydia, Puxley's Prince Albert, Sharp's Duke of York, Wilson's Harriet, Hepworth's True Briton, Brown's Dr. Watts, Brook's Flora's Garland, and Squire Meynell. 2nd. Middle Silver Medal—Mr. Norman, of Woolwich, for Wilson's Harriet, Hale's Prince Albert, Holmes's Count Paulina, Wigg's Earl of Leicester, Ely's Hugo Meynell, Mitchell's Patriot, Brook's Flora's Garland, Sharp's Defiance, Mausley's Bonny Bess, Roi du Capucin, Norman's B, and Low's Grand Sultan. 3rd. Small Silver Medal—Mr. Bates, of Oxford, for Wilson's Harriet, Hale's Prince Albert, Nix, Lord Chetwynd, Addenbrook's Lydia, Calcott's Brutus, Jones's Brilliant, Ely's Lady Ely, Hepworth's True Briton, Young's Earl Grey, Martin's Splendid, Toon's Prince Albert, Gregory's Alfred. For the best 12 blooms of white ground Picotees—1st Prize, Large Silver Medal, to Mr. Willmer, of Sunbury, whose stand contained Willmer's Princess Royal, Gidden's Vespasian, Wildman's Isabella, Nulli Secundus, Willmer's Queen Adelaide, Sharp's Wellington, Wilson's Fanny Irby, Gidden's Miss Hennell, Jessop's Sir W. Middleton, Gidden's Teaser, Barraud's Bordene, and Hupton's Charlotte. The Middle Silver Medal to Mr. Keynes, of Salisbury, for Gidden's Miss Hennell, Wain's Victoria, Sharp's Hector, Orson's Adelaide, Crask's Victoria, Wildman's Isabella, Hupton's Charlotte, Barraud's Cornelius, Wilson's Pluperfect, Green's Queen, Nulli Secundus, and Sharp's Wellington. For Heartsease, in stands of 36 varieties, Mr. Brown, of Slough, the Middle Silver Medal. This stand contained Hannibal, Viceroy, Hale's Dark, Maid of the Mill, Orlando, Bella, Fair Maid, Warrior, Eclipse, Enchantress, Mulberry Superb, Duke of Beaufort, Cotherstone, Attila, Black Prince, William Tell, Chevalier, Alicia, The Prior, Plenipo, Venus, Duchess of Richmond, and 14 seedlings. Mr. Brown also exhibited a stand of 18 varieties of Dahlias in very fine condition:—The Beauty of the Plain, Brown's Blue Bonnet, Standard of Perfection, Essex Triumph, Brown's Lady St. Maur, Sir R. Sale, Miranda, Springfield Rival, Dodd's Prince of Wales, Perpetual Grand, Bedford Surprise, Mrs. Shelley, Rembrandt, Brown's Delight, Indispensable, Phœnix, Union, Tournament, and Queen of the Isles.

*Seedling.*—For the best white ground Picotee, the Small Silver Medal was voted to the Rev. A. H. Matthews for a seedling named Enchantress; and a similar reward to Mr. Norman, of Woolwich, for the best seedling Carnation. Seedling Heartsease recommended for a prize from Mr. G. King.

SEEDLING PELARGONIUMS.—The following varieties were exhibited in addition to the three selected for prizes by the judges. Some of these were considered superior to those which had prizes awarded to them, certainly they were on an equality, and will be an acquisition to any collection. No doubt they will be offered to the public the coming season; we, therefore, give the descriptive particulars of each:—

*By Mr. Whormes, gardener to E. Foster, Esq., Clewer House, near Windsor.*—*Arden.*—Upper petals nearly covered with a dark clouded blotch, the margin a bright crimson; lower petals a pretty rose. Of first-rate form.

*Zampa.*—Upper petals large clouded dark spot, graduating off to a pretty pink margin; lower petals of a fine rose; the centre of the flower a light pink. Very good form.

*Ida.*—Upper petals nearly covered with a dark clouded spot, terminating with a margin nearly white; lower petals a pale flesh colour; the centre of the flower nearly white. Of first-rate form.

*By Mr. Mackett.*—*Virgin Queen.*—Blush white, the upper petals having a dark spot.

*Princess.*—Upper petals having a large dark clouded spot, with a pink margin; lower petals pink; the centre of the flower nearly white. Of good form.

*Elegans.*—Upper petals having a large clouded spot, graduating to scarlet, and terminating with a white margin; lower petals a flesh colour.

*Alice Hawthorn.*—Upper petals having a dark clouded spot, and a very light margin; lower petals flesh coloured; centre of the flower white. Of good form.

*By Mr. Dobson, gardener to E. Beck, Esq., of Isleworth.*—*Othello.*—Upper petals nearly all of a dark blotch, terminating with a pretty lilac margin; lower petals a beautiful lilac. Of good form, and of handsome appearance.

*Aurora.*—Upper petals nearly covered with a dark spot, and graduating to a crimson margin; lower petals a bright carmine red; centre of the flower a lighter colour. Of good form.

*Bellona.*—Upper petals nearly all of a dark clouded spot, having a crimson margin; lower petals of a deep lilac pink. Of first-rate form.

*Calypso.*—Upper petals nearly of a rich crimson, with a lighter coloured margin; lower petals flesh coloured. Of good form.

*Mark Antony.*—Upper petals nearly all of a dark blotch, terminating with a light margin; lower petals a pale pink; centre of flower nearly white.

*By Messrs. Lucombe, Pince, and Co., of Exeter Nursery.*—*Regulator* (Thurtell's).—Upper petals having a dark blotch, shading off to a pretty purple, and terminating with a white margin; lower petals white, suffused slightly with lilac. Of first-rate form.

*Othello* (Thurtell's).—Upper petals nearly all of a dark crimson maroon, with a white margin; lower petals white, veined with purple. Of fine form. The petals of the above are of firm substance, quite even on the surface, and not waved in the slightest degree.

*Alba perfecta.*—White, upper petals having a dark blotch with white margin. Of good form.

*Pluto* (Thurtell's).—Upper petals ground colour scarlet, having a dark spot; lower petals of a beautiful rosy red, centre of the flower having a fine purple tinge. Of good form.

*Zamzumin* (Beck's).—Upper petals having a large dark blotch, with a flesh-coloured margin; lower petals flesh coloured. Of good form.

*Horatio Nelson* (Thurtell's).—Upper petals having a large dark spot, with a lighter margin; lower petals a pale pink; centre of flower lighter. Of fine form.

*Admiral* (Beck's).—Upper petals having a dark spot, graduating off to rose; lower petals a rosy red.

*Susannah* (Beck's).—White, upper petals having a dark red blotch.

*Fairy Queen* (Thurtell's).—Upper petals having a dark blotch, with a white margin; lower petals flesh coloured; centre lighter colour.

*Stella* (Beck's).—Upper petals having a dark spot, edged with rosy scarlet; lower petals rosy red, veined.

*Evening Star.*—Upper petals dark crimson, with a red spot, edged with flesh colour; lower petals flesh-coloured.

*Theresa* (Beck's).—Upper petals having a large dark spot, graduating to orange, with a lighter coloured margin; lower petals of a pale salmon; centre of flower [illegible]

[illegible] (Beck's).—Upper petals having a large dark spot, with a flesh-coloured margin; lower petals flesh-coloured.

*Leonora* (Beck's).—Upper petals having a large dark blotch, edged with pink; lower petals a pale pink.

*Shakspear* (Smith's).—Upper petals nearly all dark blotch; lower flesh-coloured.

*By Mr. Gaines, of Battersea.—Eclipse* (Gaines's).—Upper petals a bright scarlet, with a small dark spot; lower petals a paler scarlet. Of good form, and very showy.

*By Mr. Hoyle, of Guernsey.—Bijou.*—Upper petals having a dark spot, shading off to scarlet; lower petals a salmon red. Very showy and distinct as a showy flower for the greenhouse.

*Pompey.*—Upper petals having a large dark crimson spot, with a lighter margin; lower petals flesh-coloured. Of good form.

*Unique.*—Upper petals nearly all a dark blotch, with a lighter margin; lower petals lilac; centre of flower nearly white. Of good form.

*Champion.*—Upper petals having a large dark spot, with a light margin; lower petals a bright rose colour.

*Titus.*—Upper petals nearly all dark, with a bright red margin; lower petals fine flesh colour; centre lighter. Of good form.

Mr. Hoyle also sent a quantity of cut specimens, consisting of the following:—Rosa, Claude, Annette, Unique: these were of very good form. Elegance: his is a very pretty variety for the greenhouse. Maud, Flora, Lady Peel, Promisa, Modesty, Gipsy Maid, Jenny Deans, Africana, Lucy, Lord Morpeth, Claude, Alice, Dowager Queen, Vesuvius, Rosalie, Mermaid, Majestic, Scinde: these have merits as ornamental for the greenhouse.

(*To be continued in our next.*)

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On Spring Blooming Flowers.—The season for procuring and planting the bulbous spring flowering plants now arriving, I beg to direct the attention of the readers of the Floricultural Cabinet to the subject of a more extended cultivation of those lovely harbingers of a more genial season. I have a small flower garden divided into numerous beds, which I designate, "The Spring Garden." It is situated opposite my sitting room, where the windows extend so low, that I have a view of the greater part of the garden as I sit in the room. It is in a very nice sheltered and sunny situation, and I can assure the readers of this, that having so lovely a spot in beautiful bloom in February, March, April, and into May, with Snowdrops, Crocusses, Hepaticas, Hyacinths, Scillas, &c., &c., is one of the most pleasing and interesting sights to see,—a garden thus adorned when there is scarcely another bloom to be seen in the open ground. I have numerous small beds in order to plant them in masses. Some beds I form in stripes of colours, giving as strong a contrast as possible.

The principal genera I grow are, the best kinds of Snowdrop, Crocus, Scilla, Hyacinth, Narcissus, Dogs Tooth Violet, Frittilaria, Jonquils, Star of Bethlehem, Crown Imperials, Dodecatheon, Early Tulips, Early Gladiolus, Early Iris, Anemone, Scarlet Turban and other Ranunculus, Cyclamen Adonis, Soldanella Bulbocodium, Helonias, Primroses, Auricula, Polyanthus, Yellow Draba aizoides, Blue dwarf Gentian, White Arabias grandiflora, Hepaticas, pink, rose, lilac, white, and blue, Blue Omphaloides. Showy kinds of the above bulbs and tubers may be procured at a cheap rate. I calculated the first season what quantity would furnish my garden, and offered a florist a stipulated sum, which was accepted. My stock has amazingly multiplied in four years.

Louisa.

**Strelitzia reginæ.**—The distinguished friend and liberal patron of science, Sir Joseph Banks, Bart., in early life was an ardent cultivator of botany and natural history, and, although under an actual matrimonial engagement, applied for and obtained the place of naturalist to the first expedition under Captain Cook, and at the Cape of Good Hope met with the fine plant in question. Finding it to be a new genus, he, with great tact, determined to name it after the Queen of England, a princess of the house of Mecklenburg Strelitz, and coined for it the classical name of *Strelitzia*, adding reginæ. A greater compliment could not have been paid her. But what became of Mr. Banks's betrothed? I heard that the suspension of Mr. Banks's proceedings was not relished by the lady or her friends, and excited some severe remarks; which, however, were soon quieted by the powerful charm of a draft in her favour on his banker for 10,000*l.*; not that he loved her less, but that he loved "science

## REVIEW.

A Practical Treatise on Warming Buildings by Hot Water, on Ventilation and the various Methods of distributing Artificial Heat, and their Effects on Animal and Vegetable Physiology. To which are added, An Inquiry into the Laws of radiant and conducted Heat, the Chemical Constitution Coal, and the Combustion of Smoke. By Charles Hood, F.R.S., F.R.A.S., &c. &c. Second Edition, greatly enlarged and illustrated by Numerous Wood Cuts, 8vo., p. 348. Published by Whittaker and Co., Ave Maria Lane, London.

Heating buildings by means of hot water, has within the last few years engaged much of public attention, and a great deal has been written on the subject by mere theorists, the work now before us is by far the best that has yet been published. The details are exceedingly clear and comprehensive, the entire subject is gone into in every minutiæ, and the book contains whatever appears to be necessary on the various topics.

Every reader of it will at once perceive that it is written by a person practically acquainted with, and who thoroughly understands the matters treated upon. In addition to the valuable details given by Mr. Hood from his own practical resources, he has added extracts from other writers of whatever was deemed illustrative of, and calculated to contribute to promote the object. To give every facility to a proper knowledge of the subject, numerous engravings are given throughout. Every person desirous of heating by means of hot water, either dwellings, horticultural buildings, offices, &c., ought to procure the book; it is the ultimatum publication on the subject.

## FLORICULTURAL CALENDAR FOR OCTOBER.

Annual flower seeds, as Clarkia, Collinsia, Schizanthuses, Ten-week Stocks, &c., sown soon in pots, and kept in a cool frame or greenhouse during winter, will be suitable for planting out in open borders next April. Such plants bloom early and fine, and their flowering season is generally closing when spring-sown plants are coming into bloom. Many of the hardiest kinds should be sown in the open borders.

Biennials, as Scabious, Sweet Williams, Canterbury Bells, &c., should now be planted where to bloom next season; they do better than when kept till spring.

Cactus.—Plants that have been kept in the open air now put in the stove will soon bloom.

Carnation layers should immediately be potted off if not done before.

China Rose cuttings yet strike very freely.

Calceolaria seed should be sown soon, or be reserved till February.

Auriculas, Polyanthuses, &c., should be placed in winter quarters by the middle of the month.

Cuttings of stove plants, as Vincas, Roellias, Justicias, Clorodendrons, should now be struck; they will make pretty plants for next season; as also sundry greenhouse plants.

Dahlias.—Where the laterals or buds are very numerous, they should be thinned out so as to have vigorous blooms. Collect seed of the early-blown flowers. Heap soil round the stem to save the crown from injury by frost.

Mignonette may now be sown in pots to bloom in winter.

Pelargonium cuttings struck root should now be potted off. Seeds should be sown as early now as possible, or otherwise left till spring.

Pinks. pipings of, if struck, may be taken off and planted in the situations intended for blooming in next season, as early as possible.

Plants of Herbaceous Calceolarias should now be divided, taking off offsets and planting them in small pots.

Verbena Melindris (chamædrifolia), &c. Runners of this plant should now be taken off, planting them in small pots half filled with potsherds, and the rest with good loamy soil, then placing them in a shady situation. It should be attended to as early in the month as convenient. When taken into a cool frame or greenhouse for winter protection, much of the success depends on being kept near the glass; or sink a box or two half filled with potsherds, and the other good loamy soil round the plant, so that the runners, being pegged down to the soil, will soon take root at the joints. When a sufficient number are rooted, separate the stems from the parent plant, and those in the boxes will be well established, and, being removed before frost, are easily preserved in winter, as done with those in pots.

Plants of Chinese Chrysanthemums should be re-potted if necessary; for if done later the blossoms will be small. Use the richest soil.

When Petunias, Heliotropium, Salvias, Pelargoniums, (Geraniums, Mesembryanthemums, Bouviardias,) &c. have been grown in open borders, and it is desirable to have bushy plants for the same purpose the next year, it is now the proper time to take off slips, and insert a number in a pot; afterwards place them in a hotbed frame, or other situation having the command of heat. When struck root, they may be placed in a greenhouse or cool frame to preserve them from frost during winter. When divided and planted out in the ensuing May in open borders of rich soil, the plants will be stocky, and bloom profusely.

Tigridia pavonia, commellina, &c. roots may generally be taken up about the end of the month.

Lisianthus Russellianus seed sown immediately will produce plants for next year's blooming. It is one of the finest plants grown. It is best treated as a stove biennial.

Plants of Pentstemons should be divided by taking off offsets, or increased by striking slips. They should be struck in heat.

The tops and slips of Pansies should now be cut off, and be inserted under a hand glass, or where they can be shaded a little. They will root very freely, and be good plants for next season.

Lobelias.—Off-sets should be potted off, so as to have them well rooted before winter.

Greenhouse plants yet out will require to be taken in by the middle of the month; if allowed to remain out much longer, the foliage will often turn brown from the effects of cold air. Where they are in, all air should be admitted by day. The plants should not be watered over head at the close of the day. Water the soil too only in the early part of the day, if not so attended to, the leaves will be liable to damp off. Loosen the soil at the surface frequently, it contributes much to health.

Seeds of many kinds of flowers will be ripe for gathering this month.

When Lilies, Crown Imperials, Narcissuses, &c., require dividing, take them up now, and replant them immediately.

Hyacinths for forcing, if not already done, should be potted immediately. So of Guernsey Lilies and other bulbs.

See last month's Calendar for Ranunculus beds.

Tulip seeds may now be sown in shallow pans or boxes, covering it slightly.

Shrubs.—Plant where required as early as possible, they will strike root before winter.

Sweet-scented Violets.—Plants should be potted, or planted in frames, now for forcing. (See articles in former Numbers.)

1 Fuchsia Village Maid  2 Thunbergia chrysops

# THE
# FLORICULTURAL CABINET,
## NOVEMBER 1st, 1844.

## PART I.
## EMBELLISHMENTS.

### ARTICLE I.

### FUCHSIA—VILLAGE MAID. (Harrison's.)

remarked in previous numbers of the Floricultural Cabinet, that we have for several years paid particular attention to the culture of the Fuchsia, and to the raising of new kinds; the one now figured is an hybrid which bloomed for the first time this year. The plant is of a very neat habit, forming a bush of about two feet and a-half high, with stiff branches, slightly pendant at the extremities, and blooms profusely.

### THUNBERGIA CHRYSOPS. Golden-eyed.

This very charming new species of Thunbergia is a native of Sierra Leone, and was brought from thence, at much risk and danger, by Mr. Whitfield, to the Right Hon. the Earl of Derby, Knowsley Park, near Prescot, in Lancashire. Through the liberality of his Lordship it has been liberally distributed. The habit of the plant appears to be with us, growing in a greenhouse, what may be designated but a half climber, forming a pretty bush. Having cut off the ends of the branches for striking, it induced numerous stiff growing laterals, which give the plant a compact form. It blooms freely, and will bloom all the summer and autumn. It grows vigorous, and is easily increased by cuttings. It deserves to be grown in every greenhouse, conservatory, or hot-house; and as a companion to the yellow and white flowering kinds will produce a very pleasing contrast. We have seen a number of plants, but it appears not to be attacked by the red spider, as are some of the other kinds. It is a very likely plant to flourish well in a dwelling-room.

## ARTICLE II.

### DESCRIPTION OF A CHEAP MOVEABLE HOT-WATER APPARATUS FOR HEATING A GREENHOUSE, &c.

BY MR. JOSHUA MAJOR, LANDSCAPE AND ARCHITECTURAL GARDENER,
KNOSTHORPE, NEAR LEEDS.

I PERCEIVE in the last number of the CABINET a Correspondent asks, "If some cheap moveable hot-water apparatus could not be contrived for warming a small greenhouse, without setting boilers and forming flues." If the following communication has not already appeared in the FLORICULTURAL CABINET respecting a portable hot-water apparatus which I invented in the year 1833, probably its insertion in your next may prove useful to your correspondent.

The apparatus may be made of tin or copper; the latter, though of course it would cost more at first, would, owing to its durability, in the end no doubt be the cheapest. Charcoal or small coke is employed for heating the apparatus; oil-lamps have been tried instead of it, but with not near so good an effect. As it is necessary to have pipes to convey the effluvium (arising from the fuel) out of the place required to be warmed, it will, in order to secure all the heat possible, be of importance to introduce a sufficient length to allow the heat to pass off, before the ends of the pipes are turned to the outside. In order to make the smoke conductors suitable for any situation, it is only necessary, in addition to the elbow pipes, to be provided with several lengths of straight pipes, placing one elbow upon the permanent smoke conductor connected with the fire, and the other at the extremity or midway of the piping, as it may be required. The largest sized apparatus could not well be more than eight feet long; as, if larger, it would be inconvenient to move about. The size of the one which appears the most useful is as follows:—the whole height of the centre portion of the apparatus, comprising the boiler, &c., is 16 inches, and width 7 inches by 9 inches; the fire-pan 6¼ inches by 7¾ inches, and 4 inches deep; surrounded on three sides by a boiler half an inch in diameter, which becomes more spacious upwards as the fire-place diminishes. The opening necessary for the reception of the fire-pan and for supplying it with fuel is 8 inches wide by 6 inches deep. At the top of this opening the fire-place commences tapering; consequently the water in the boiler expands more immediately over the fire, the smoke-pipe takes its regular width (1½ inch in the boiler) about an inch below where the lid unites. The horizontal water pipes are each 33 inches long by 2½ inches in diameter; the end pipes are 15¾ inches high by 3 inches in diameter; a feeder is added, in case it should be thought better to have the lid fixed tight on the boiler. In order to promote the circulation of the water, small holes are to be perforated in the top of the lids, which are also intended to be fixed tight. The apparatus may either be placed on the floor of the place to be warmed, or raised by bearers, or suspended by wire or cord; the two latter methods assist the fire to burn more freely.

## ARTICLE III.

## ON HEATING A GREENHOUSE BY MEANS OF HOT WATER, &c.

BY C. C., OF SOMERSETSHIRE.

According to my promise in the Cabinet for February, and by the desire of your correspondent, W. S. A., in the last Cabinet, I now offer a few hints on the best manner of heating a greenhouse, which I hope will be of some use to the reader.

There is no doubt but hot water is the best agent for heating a greenhouse, the only thing to find out is the best manner of applying it to that purpose, which, I think, will be effected by pursuing the following method.

I recommend your correspondent to get one of Stevenson's boilers according with the size of his house. If the house is not more than twenty feet long the smallest size will do, and as this boiler consumes but very little fuel, the best is coke from the gas-works, which is also very cheap. The boiler requires no setting, only to place it on a plain bottom; it takes but very little room and may be placed in any convenient corner. At the top of the boiler is a union-joint to attach a pipe, which may be of lead or iron, and be carrie round the house and enter the boiler near the bottom. If the party choose the pipe may be carried along a channel in the floor, and some fancy trellis iron-work be placed over it, which would be rather ornamental. A single pipe of two-inch bore would be quite sufficient to attach to the small-sized boiler. As the main point in the management of a greenhouse in the winter season is to keep it in a healthy state, but very little moist heat would be required; it would, nevertheless, be well to have two or three tin troughs, about a yard long, to place on the pipes, and fill them with water, which would give a moist heat at any desired time. It cannot be too strongly remarked that too much fire heat is very hurtful to most greenhouse plants in the winter, enough only being required to keep out frost, or to dry up damp, which should be done by lighting some fire in the morning, and opening some of the sashes, if the weather will permit it, and let the fire go out towards evening, except the weather be severe, in which case enough fire should be kept in to raise the thermometer to about forty degrees, which would be quite sufficient in ordinary frost; the water would not require to be heated above blood heat to keep up the desired temperature.

## ARTICLE IV.

### ON FORMING THE DIRECTIONS OF PLEASURE-GROUND WALKS, &c.

BY AN AMATEUR LANDSCAPE GARDENER.

Much perplexity occurring in giving a proper direction to the walks of a shrubbery or pleasure-ground, and having had a considerable share in marking out the lines of walks in various situations, induces me to transmit a few hints on the subject, hoping it may in a degree assist some of the readers of the Floricultural Cabinet in such operations.

Walks are not formed by nature, but are the efforts of man or beast, &c., and the difficulties existing in opposing objects render curved lines and circuitous directions to be taken. The refined taste of modern gardening, especially among trees, shrubs, &c., is to reject straight paths, but unless there exist a reason beyond this, to adopt it in all cases would be faulty; as in the surface of the earth generally, hills, valleys, trees, shrubs, or water, points out the necessity, so in the case we refer to there should always be a reason for diversion of path, and if the situation does not naturally possess such, art must be employed to effect the necessity. Windings, however, must not occur so frequent in wide walks as in narrow ones, but be in proper proportion where art is employed generally, as is to be done in flat situations, taking care that two curves are not seen at one view, but an object of concealment exists, unless in the case of a winding stream of water.

In marking out roads the artist must greatly depend upon his feeling, in the choice of a line which shall at once be inviting and productive of pleasure, as leading to those spots where beautiful natural scenes are presented to view. These lines may be accurately marked out from a plan, or by means of arrangements in nature; but a line of this sort always betrays a compulsory course, it wants that free and bold sweep, or, in other words, it wants *nature*.

It also frequently happens, that a line which appears particularly beautiful on paper is not pleasing in nature. The paper is a flat surface, this is seldom the case in nature; consequently, the lines must appear different, as we have previously observed. Therefore lines rising from valleys, and ascending over hills, are much more difficult to trace out than those on a level surface. In the first case, their appearance is as varied as the forms of the hills and dales over which they are to wind. To overcome this difficulty, I know of no other rule than that these lines should be carefully tested, and by repeated corrections and improvements be brought nearer to nature as well as to beauty.

Tracing out walks should therefore, 1st, not be considered so trifling, because much more is required from the lines which define them than that they should merely describe curves. They should have a noble, majestic, and graceful curve. 2nd. At every new turn, directly opposed to the preceding one, the reason and necessity which occasioned it must be shown. 3rd. The objects to which the walk leads should account for its existence.

Walks may be so constructed as to make gardens appear much larger than they actually are, by never allowing the boundary, which is often very limited, to be seen, but which must be concealed by thick plantations, and its vicinity never guessed at. Especially, they must not approach too near to those openings, where the outer landscape, by means of ha-has, appears as if it belonged to the garden. A garden may also appear much larger to the spectator when the paths take contrary turns, and by circuitous routes describe a longer line. But this sort of deception does not always succeed; the deceit is but too soon discovered, even if these sudden windings, which must, besides, be often repeated, do not present obstacles.

Among such repeated turns, and to dissipate the suspicion that they might awaken, the spectator must be surprised, now by a beautiful inscription, a murmuring fountain, which will recal Vaucluse and the complaints to Laura; and now by an urn, a bust, &c.; and thus his mind be occupied with more elevated subjects than the course of the walks.

A neighbouring path should never be perceived from any walk, because this would destroy the illusion of size. The plantations, therefore, which separate these near walks, must be close and impervious. At the narrowest spots these plantations should be at least from 15 to 20 or 30 feet wide. In large extensive grounds, however, where no deception to increase the apparent size is necessary, sometimes, from one walk, others may be seen through transparent plantations; and, from the momentary appearance and disappearance of the passers by, animated and lively pictures may be produced.

A walk winding in a gentle slanting curve up a steep bare hill, on the other side of which a beautiful landscape, half concealed, is by degrees revealed to view, has a particularly picturesque and beautiful effect. To display this sort of beauty, however, the walk should only have a single long shallow curve, which would also render the ascent easier. For the same reason, those walks which are to be carried over very steep hills can only be properly executed when they are cut first from the right to the left, and then from the left to the right, (zigzag,) and thus their extent increased. In cases, however, where the zigzag line cannot be sufficiently extended, or cannot be applied, in order to facilitate the ascent, steps, either of stone or of oak, must supply its place. These steps should not be more than five inches high, and not more nor less than two feet apart, to be ascended conveniently.

When two walks are to be united, it should never take place at a right or obtuse angle, but rather at an acute angle, by which the lines of both walks will be united in a much more beautiful manner.

The marking out of all these lines and forms, if they are to approach their original pattern, nature, is, as we have already said, a matter as important as it is difficult. It is easily understood, therefore, that he who undertakes to lay out a garden in the natural style ought to be a good draughtsman in geometrical plans as well as in landscapes. But there is a great difference between expressing these forms in miniature on paper, and marking them out in their natural size in nature. If the cleverest landscape-painter were to draw such large lines, which often proceed in connected circles, and in lines several miles in extent, with a tracing-stick which must be four or five pounds' weight, he would find great difficulties, and his first attempt would not likely be successful.

In order to facilitate this operation, I will here explain my method of drawing in nature, which I have followed since I first began to practise, and which I have communicated to many others. The plan on which the improvements are designed, which are now to be staked out, shows the natural objects, under what form they are to appear, and where they are situated. According to this plan, the principal points in nature will be determined; but, as has been already observed, without straining to observe them too minutely, in case nature should thereby be distorted, or fine trees fall under the axe, which, without injuring the landscape, might have been preserved, if the line of the water or walk, or any other line, had been altered a little. There may also be obstacles of another kind contrary to nature, which could not be foreseen in making the plan.

But these difficulties will not be insurmountable to one who is familiar with nature, and her numerous forms and means of remedy; because he will make such alterations as will not affect the beauty of his grounds, but, if it be possible, improve them by those very means. Hence, it is clearly enough seen, that, in executing the plan, it cannot be exactly followed up, because it only gives the principal forms and situations. It can only show the scenes the grounds are to present; and point out where the hills, the valleys, the lakes, the ponds, the waterfalls, the bridges, &c., are to find their places.

The instrument with which large and small outlines in nature are drawn on a large scale is a round stick, or tracing-staff, pointed with iron at the bottom, to draw the lines in the earth. The artist holds this stick with the right hand above, and the left below, and in such a manner as that the iron point is turned towards the ground backwards. With an erect position and proceeding, and his glance directed forwards towards the existing localities, the main points being previously determined by the plan, and which his line (if no obstacles intervene) is to arrive at, he pursues, with a steady pace, the beautiful undulating line which his practised imagination presents to his mind, and, as it were, displays before him.

With his tracing-stick turned backwards, and grasped with a firm hand, the point pressing on the earth, the artist imprints the line of beauty on the ground mechanically without any further care or requiring to look behind him; immediately after him follow two labourers, who set in posts, but do not beat them firmly in at first. When he has reached the end of his line, he turns back, examines its course, improves it, and then has the posts firmly driven in, or the line cut out with a sharp hoe.

Thus the artist remains in an upright position; he overlooks as he draws the points determined beforehand which his line is to touch. and advances towards them in a manner as agreeable as it is natural, He has the whole locality which his grounds are to embrace, and the forms which he has already sketched, and which are to be in unison and harmony with the rest, constantly before his eyes; and his perception of the beauty and truth of nature directs his steps, and consequently his tracing-stick, which follows faithfully the motions of its master.

The chief artistical value of a good picture lies more in the correctness of the drawing than in the colouring; therefore, the faults of colouring are more pardonable than those of drawing. Thus, also, correct drawings of beautiful picturesque forms and outlines are required in gardens, because they also greatly contribute in giving the grounds their chief merit. For this reason, the manner above described of drawing on a large scale is to be preferred to the usual method, because it is capable of defining more distinctly than the other does. The practised artist is able, also, to draw as quickly as he goes, but while drawing out the line he must not look backward, or he will be in danger of losing the imaginary line, and forming another which will not properly harmonize.

# ARTICLE V.

## FLORICULTURAL GLEANINGS.—No. 16.

### BRIEF REMARKS ON DESIRABLE TULIPS, IN REPLY TO THE INQUIRY OF A CORRESPONDENT, "W. J—n."

BY MR. WILLIAM HARRISON, SECRETARY TO THE FELTON FLORISTS' SOCIETY.

In complying with the request of your correspondent, I beg to say that I feel great pleasure in doing so, as I cannot help thinking that the many inquiries now made, and the extensive correspondence carried on throughout the kingdom, on the subject of this favourite flower, are very convincing proofs that the "Tulip fancy" is spreading far and fast among rich and poor throughout "our sea-girt isle." The valuable varieties have been rapidly circulated in the last few years, and as your correspondent wants information respecting varieties, "as near *perfection* as possible," I have confined the following remarks to those sorts which I consider in general very fine. The lateness of the season prevents me from indulging in any preliminary remarks, and I shall therefore proceed at once to the

#### FEATHERED ROSES.

**Catharine.**—This variety has a pure bottom, good cup, cherr feather, and slight flame, but is a trifle pointed in the petals.

**Claudiana.**—This possesses a very pure bottom, good cup, and beautiful cherry feather.

**Cerise Blanche**, has a very fine pure bottom, fine cup, and beautiful delicate rose feather.

**Comte de Vergennes**, has a remarkably pure bottom, beautiful cherry feather, cup not very good, the outer petals generally turning outwards, but still a very beautiful middle-row rose.

**Dutch Ponceau.**—This is one of the most beautiful feathered roses in cultivation, the cup being remarkably pure, the feathering very delicate (if the finest strain can be got), and the petals widest almost at the very top, forming a very fine cup. It is a lovely and delicate variety.

**Lady Crewe.**—This is another very fine feathered rose, pure bottom, good cup, and the feathering generally heaviest round the top of the petals.

**Rosa Blanca.**—This is another beautiful variety, finely feathered, with a deep rose. A splendid bloom of this variety took the first prize at Felton this season, and was one of the finest feathered roses that I have ever met with.

**Rose William**;—fine feather, heaviest round the top, pure bottom, but rather long cup.

**Rose Carmuse**;—pure bottom, good cup, fine feather, and slight flame.

**Venda**;—a fine feathered clean rose.

**Arlette.**—This is a very beautiful flower, very fine cup, pure bottom, and splendid feather. A breeder of it broke in the collection of Thomas Bromfield, Esq., of Belford, two years ago, and it appeared to me to be one of the very finest in his large collection.

## FLAMED ROSES.

**Aglaia.**—This is a very fine flower, clean in the cup, beautifully feathered and flamed, and ought to be in every collection.

**Catalini.**—This also is a fine pure bottom, and good flamed flower.

**Cerise a Belle Forme.**—This variety possesses an extra fine cup, pure bottom, feathered, and slightly flamed.

**Cerise Triumphant**; also very clean and fine, generally feathered, and slightly flamed.

**Clark's Clio.**—This is a very beautiful flower, having a heavy *cherry feather, fine flame,* and clean bottom. It ought to be in the possession of every competing amateur.

**Duchess of Clarence.**—This flower, as we grow it here, is a very beautiful flamed rose, fine cup, and clean bottom, but the stamens are sometimes a little *stained* at the top.

**Grand Rose Imperial** is a fine flamed rose.

**La Belle Nanette.**—This is a splendid variety, clean in the cup, and finely feathered and flamed, and in every respect beautiful.

**Lilas Rose.**—This is grown very fine in the north, the cup being fine and pure, with a heavy feather, and generally a slight flame.

**Madame Vestris.** This is a magnificent flower, the cup when grown strong getting to a large size. It has a beautiful heavy cherry feather and flame, and is certainly one of the finest roses in cultivation, and ought to be in every collection. It is said by many to be the same as Clark's Clio, and Princess Sophia of Gloucester. I cannot vouch for the accuracy of this, although my blooms were certainly very similar this last season.

**Monsieur Pitt.**—This is another pretty rose, but rather narrow in the cup; heavily feathered round the top, and slightly flamed; bottom very pure.

**Rose Quarto**; fine clean cup, and palish flame.

**Rose Unique**; heavy rich dark rose flame, good cup, and pure bottom.

**Rose Triomphe Royale.**—This is an old variety, well known and highly esteemed. It possesses a fine cup, pure bottom, and is generally feathered and flamed; and as it takes prizes in all parts of the kingdom, the competitor cannot grow too much of it.

## FEATHERED BYBLOMENS.

**Ambassador.**—This, in its best state, possesses a good cup, pure bottom, and fine dark feathering, and is a very desirable flower.

**Black Bagnet.**—This is a favourite feathered byblomen in the north, the cup generally being large, and the bottom pure, and the feathering bold and heavy, making it an attractive flower at an exhibition.

**David.**—This is a very pretty feathered variety if the fine strain can be obtained, which however appears to be rather difficult to accomplish. The cup is clean, and the feather a fine dark purple, although I have always considered the petals rather too narrow at the top to constitute a first-rate show flower.

**Imperatrix Florum.** This is a very pretty feathered byblomen with me, bottom pure, cup low and wide, and the feather very fine and heaviest round the top.

**Jeffrey's Royal George**; said to be one of the finest *in the world*, but it has never prospered with me.

**Capt. Lampson** (Lawrence's) possesses a fine cup and beautiful feather, but the bottom is very creamy and difficult to bleach.

**Reine de Sheba.**—This is one of the most delicate and lovely gems that I have yet seen. When opening, it seems a long narrow cup and rather creamy bottom, but after it gets open it forms a handsome cup, with a palish lilac feather, the little yellow in the bottom bleaches out, and it is then the admiration of every beholder. No collection should be without this beautiful flower.

**Roscius** has a very creamy bottom, good cup, fine feather, and very slight flame.

**Winifred** possesses a very pure bottom, dark feather (not very regular), and slight flame; a very pretty variety.

**Louis XVI.**—Grand cup, and finely rounded petal, but the bottom of the cup very indifferent. What a pity he is not *perfect* in this respect! ! !

## FLAMED BYBLOMENS.

**Constant.**—This is a very beautiful byblomen, finely feathered and slightly flamed, good cup and bottom, as pure as satin the moment it expands, and fit for any stage in the empire. Unfortunately it is a very slow propagator, so that those who have it can circulate it very slowly.

**David.**—Pure bottom, good cup, and heavy purple feather and flame.

**Duke of Northumberland.**—This is a very magnificent middle row byblomen, and worthy of introduction into the choicest collection. The cup is large and fine, the bottom perfectly pure, the feather nearly black, and a fine pencilled flame running a good way down the petals, yet leaving a sufficiency of the bottom pure. The whole of the stock of this splendid flower is in the possession of Mr. Bromfield, of Belford, who bought it some years ago from the person who broke it. It is well worthy of the attention of "the fancy," and should be in every select bed.

**Ely's Queen Victoria.**—This variety perhaps shows finer pencilling than any other flower in existence. It possesses a fine cup, a feather made up entirely of beautiful pencillings, and also a slight flame. Its bottom is rather creamy, but still it is a beautiful and delicate variety.

**Holmes's King**, possesses a fine white, clean cup, and a beautiful angular pillar up the centre of each petal. This variety sometimes feathers also, but this I understand is very rare.

**La Bruine Diana.**—This is a very excellent flower, fine pure cup, and heavily flamed with a dark purple.

**Lawrence's Friend.**—This is a splendid byblomen. It possesses a fine dark heavy feathering, and is also flamed, forming a very fine large cup. The bold dark marking and the fine white ground colour form a fine contrast, and make it an attractive flower for an exhibition.

**Perle Blanche.**—This flower possesses a fine cup, pure bottom, light feather and flame, and is worthy of a place in any collection.

**Princess Charlotte's Cenotaph.**—This variety is a pure white with the exception of a single stripe (up the middle of each petal) of pale purple, and is the only variety in existence marked in this style.

**Roi de Prusse.**—This is a pretty little first row flower, fine dark purple feather, and slight flame; bottom quite clean.

**Roi de Siam.**—This is a favourite in the south, but it is rather coarse as we grow it here. The cup is good and the flaming heavy, but the bottom is rather creamy.

**Triumphe de Lisle.**—This is a fine strong flower, dark feather and heavy flame, and worthy of a place in any bed.

**Violet, ma Favorite.**—This is a delicate and pretty flower, having a pure bottom, good cup, and pale lilac flame.

**Rubens**, has rather a creamy bottom, good cup, feather, and heavy flame.

**Alexander Magnus**, too, should not be passed over without notice, being remarkably pure in the bottom, good cup, and feathered and slightly flamed.

## FEATHERED BIZARRES.

**Bernadotte.**—This variety possesses a fine pure bottom, good cup, and fine dark brown feathering, and is a pretty first row flower, but the anthers are quite yellow.

**Captain White** (Tyso's finest strain).—This is a fine rich bizarre, good yellow, pure bottom, fine cup, and brown feathering, and is a decided favourite when this strain can be got.

**Charles the Tenth.**—This is also a fine feathered flower, pure in the bottom, good cup, and feathering heaviest round the top, and finely pencilled downwards.

**Demetrius.**—This has long been a favourite flower in Northumberland, and often wins. The ground colour is a rich yellow, bottom pure, and the feathering a fine dark brown, but the cup is rather narrow.

**Lawrence's Ostaide.**—This is a very pretty bizarre when the bloom is young, having a good cup, rich yellow, and fine broad brown feather; but the yellow of this variety very soon bleaches to a very pale straw colour, so that it ought to be shown very soon after it expands, and then it is a very attractive flower.

**Strong's Plato.**—This possesses a pure bottom, good cup, and very heavy feather.

**Lawrence's Glencoe.**—This I believe to be one of the finest bizarres in existence. It has an exceedingly rich yellow ground, and has this year been beautifully feathered with a heavy dark brown feather round the top, nearly approaching to black. It is a very valuable addition to a collection, the cup and bottom being both quite first rate.

**Bartlet's Guido.**—This possesses a rich yellow ground, pure bottom, and fine brown feather, but the petals are rather long and narrow.

**Harrison's Border Chief.**—This promises to be a very fine variety, and broke last year in my bed. It possesses a fine low cup, very pure bottom, and rather a slight brown feathering, heaviest round the top. It is a second row flower, and, so far, seems promising.

**Harrison's Pegasus.**—This also promises to be a fine variety. The cup is large and strong, and perfectly clean, the feather a dark brown, slight up the edges of the petals and heavy round the top. Should it maintain this character I think it will be a very desirable variety. It only broke this season.

**Rutley's Albano.**—This variety has a pale yellow ground, pure bottom, and very fine feather, but the outside of the petals is nearly white.

**Tyso's Polydora.**—As this variety was figured in the Cabinet last year, it will perhaps be only necessary to refer your correspondent to the plate. It is a truly beautiful variety, and ought to be in every collection. I had the pleasure of seeing it growing in Mr. Bromfield's collection in 1842, and it was there universally admired.

**Walker's King.**—This is a very beautiful variety. The cup is good, the ground colour a rich yellow, the bottom very pure, and the feathering slight and of a fine brown. The correctness and delicacy

**Surpass Catafalque** and **Old Catafalque** must not be omitted, as they are both very fine, but there is a great deal of *trash* sent over the country for the latter variety. I, myself, have got it twice in a bad state.

## FLAMED BIZARRES.

**Dickson's Duke of Devonshire.**—Having already in this work, (p. 83, vol. xi.,) denominated this variety the "Champion of England," I beg to refer your correspondent to the remarks there made upon it.

**Strong's Titian.**—This is another beautiful bizarre. The ground is a fine rich yellow, and the feathering and slight flaming a very dark brown approaching to black. It is a splendid flower, and ought to be in every collection.

**Strong's Hero.**—This is another very pretty variety, having a fine rich yellow ground, and although rather irregularly feathered and flamed with a lighter brown than the foregoing, is still a pretty and desirable flower.

**Ophir.**—This is a splendid flower, although rather long in the cup. The ground colour is very rich, and the feather nearly black. It is also slightly flamed. Nobody can grow too many roots of *Ophir.*

**Lawrence's Bolivar.**—This is another fine flower, rich yellow ground, dark feather, and slight flame.

**Damascus** (Lawrence's).—This variety is magnificent, cup extra, ground fine, and feathering and flaming quite black. I applied to various quarters before I could get this flower, as it is very scarce and in few hands. It is a distinct and striking variety in a bed, and ought to be in every good collection.

**Shakspere** (Lawrence's).—This is another fine feather and flamed bizarre, and in every respect a valuable and desirable flower for the competing amateur.

**Paul Potter** is another good bizarre, although it generally retains a good deal of the *breeder* colour near the top of the petals, this being a much lighter brown than the general marking. This, whatever some amateurs may say to the contrary, is a very sad blemish in any flower, and detracts much from its value.

**Polyphemus.**—Much has been said of this flower, and therefore it is not necessary to say much here. It is admitted by all to be one of the very best cups, occasionally feathered, but often far too heavily flamed. Although often grown fine about the metropolis, it is unfortunately very seldom so in the north of England.

Prince Leopold bloomed very fine with me this last season, and seems a very good flower, clean in the cup and finely flamed.

Having now noticed a few of the leading flowers, and trespassed, I fear, on the pages of the Cabinet, I shall close for the present. If spared with health to see another blooming season, it is my intention to furnish you with a brief tabulated catalogue of all the principal varieties grown in the north, so that it may be easy of reference. I trust the foregoing hasty remarks will be useful to your correspondent, and if he acts upon them, and selects from the list, I think they will not readily disappoint him. He has my best wishes for his success, and I shall be glad to learn at any future time that the varieties he purchases from the foregoing list, have afforded him as much gratification as I myself have derived from them.

Felton Bridge End, October 18, 1844.

# PART II.

## LIST OF NEW AND RARE PLANTS.

**Bignonia Carolinæ. Lady Caroline's Bignonia.** (Bot. Reg. 54.) Bignoniaceæ. Didynamia Angiospermia. Said to be a native of Buenos Ayres. It has bloomed in the collection of plants at the Earl of Ilchester's, Melbury, in Dorsetshire. It is a neat climbing species, blooming profusely. The flowers are fragrant, of a snowy-white. Each blossom is nearly two inches long and one and a half across the five-limbed face. The plant is of that class suited to be trained round a wire trellis, and so bringing a mass of bloom together. It is a very desirable plant for a conservatory or warm greenhouse. In order to induce them to bloom well the pot should be placed where the roots can receive warmth. The finest blooming plants of Bignonia venusta we ever saw, were grown in tubular boxes placed at the ends of a bark pit, in a coolish vinery, holes being bored at the sides through which the roots protruded into the old tanner's bark. The entire tribe of Bignonias is comprised of lovely flowering plants, and if cultivated properly, and trained as is usually done to what are termed pot climbing plants, as Manettia, Tropæolums, &c., they would rank as of first-rate beauty.

**Cattleya Skinneri. Mr. Skinner's Catleya.** (Pax. Mag. Bot.) Orchidaceæ. Gynandria Monandria. A native of Guatemala. Fine plants have bloomed in the collections of F. G. Cox, Esq., of Stockwell, in Surrey, and Messrs. Loddiges, of Hackney. The plant requires a higher, but very moist, degree of heat than any other of the Cattleyas. The flowers are produced on stiff, short racemes. Each blossom four inches across. Sepals and petals of a rich lively rose colour. Lip rose with a dark circle at the mouth, and the inside of the funnel-formed portion, white.

**Chabræa runcinata. Changeable flowered.** (Bot. Mag. 4116.) Compositæ. Syngenesia. Æqualis. A native of Chili, from whence seeds were sent by Mr. Brydges. It has bloomed in the Regent's Park Botanic Garden, London. The stems grow to a foot, or a foot and a half high, branched from the root, and more branching above. The flowers are produced in sub-panicles. Each blossom is about an inch across, white, occasionally changing to a rose colour. In appearance like a double white Daisy.

Cryptandra suavis. Sweet-scented. (Bot. Reg. 56.) Rhamnaceæ. Pentandria Monogynia. A native of the Swan River Colony, having an Heath-like appearance. In its native habitat it grows on barren hills and rocky places, or in light sandy soil. It is a neat little shrubby plant, thrives well in the greenhouse. The flowers are bell-shaped, each about a quarter of an inch long, white. It is a pretty plant and well deserves a place in the greenhouse.

Cratægus crenulata. Indian Pyracantha. (Bot. Reg. 52.) Roseaceæ. Icosandria Pentagynia. A fine hardy evergreen shrubby plant, from Nepal, which attains about the same size as the common Pyracantha, and requires a similar treatment. It blooms most profusely in June and July, the flowers are white, and at the closing part of summer and autumn its clusters of fine red berries produce a very pleasing appearance. It grows freely against a wall in the garden of the London Horticultural Society.

Dendrobium compressum. Flat-stemmed. (Bot. Reg. 53.) Orchidaceæ. Gynandria Monandria. A native of Ceylon, sent from thence to the Syon Collection. The flowers are small, each about three quarters of an inch across, pale yellow, produced in small panicles.

Echinocactus concinnus. Neat Echinocactus. (Bot. Mag. 4115.) Cacteæ. Icosandria Monogynia. A globular stemmed one. Flowers near three inches across, of a sulphur yellow, having each petal tipped with red.

Epacris autumnale. Autumnal flowering. (Pax. Bot. Mag.) Epacrideæ. Pentandria Monogynia. A beautiful flowering hybrid, which has been obtained by Mr. Low, of Clapton Nursery, from Mr. Cunningham, nurseryman, of Edinburgh. It commences blooming at the end of October and continues till April, thus producing a beautiful appearance through winter. The tube of the flower is of a rich crimson, having the top divisions of the mouth white. Each blossom is about an inch long. They are produced numerously in fine spikes. It merits a place in every greenhouse.

Epidendrum verrucosum. The Warted. (Bot. Reg. 51.) Orchidaceæ· Gynandria Monandria. From Mexico. It has bloomed in the collection of Messrs. Loddiges. The flowers are produced in nodding racemes of about a foot long, each blossom being about three inches across, of a rich rosy-crimson colour. The flowers are not only beautiful, but delightfully fragrant.

Juanulloa parasitica. The Parasitic. (Bot. Mag. 4118.) Solanaceæ. Pentandria Monogynia. (Synonym Brugmansia parviflora, Brugmansia floribunda.) Dr. Hooker observes, "This so called Brugmansia can be no other than that remarkable parasite (or rather, I apprehend, an epiphyte) upon the trunks of trees in woods near Pozuzo and San Antonia de Playa Grande in Peru. Notwithstanding its parasitic nature, it flourishes freely if planted in earth, and kept in a moist and warm stove. It is a smooth shrubby plant, somewhat of the habit of a Portlandia. The flowers are produced in terminal drooping racemes, of eight or ten blossoms in each. A separate blossom is about two inches and a-half long, of a pretty orange colour. It is a very desirable plant for a warm greenhouse. If forced a little in a hot-bed frame, or plant stove, vinery, &c., in its early stage, it may then be removed to the greenhouse or conservatory, and blooms freely."

Osbeckia stellata, Variety. The Starry, with small scales. (Bot. Reg. 55.) Melastomaceæ. Octandria Monogynia. It is a greenhouse plant, the species being a native of Nepal. This variety has bloomed in the collection of H. T. Hope, Esq., Deep Dene, near Dorking, in Surrey. The flowers are produced in terminal heads of several in each. A separate blossom is about two inches across, of a pretty rosy-lilac colour, being very showy.

Pterodiscus speciosus. The Showy. (Bot. Mag. 4117.) Pedalinæ. Didynamia Angiospermia. This plant was discovered in Macalisberg, by Mr. Burke, while engaged in procuring plants and animals for the Earl of Derby, in the interior of Southern Africa. The plant bloomed in the stove collection at Knowsley Gardens, but it appears to be of that class of plants which will flourish well in a warm greenhouse, or in the open air during summer. The root is tuberous, large, globose, and from its summit the stem rises, which soon divides into numerous stout succulent branches, bearing opposite leaves, and large handsome red-purple flowers in the axils of those leaves. The flower is funnel-shaped, about two inches and a half long, and two across the mouth. It is a very splendid and beautiful flowering plant, well deserving a place in every situation it can be grown in.

Vanda teres. Quill-leaved. (Bot. Mag. 4114.) Orchidaceæ. Gynandria Monandria. A native of Sylhet, where it was discovered by Dr. Wallich growing upon trees in that situation. Sepals white, with a slight tinge of rose. Petals deep-rose, with pale, nearly white margins. Lip beautifully variegated with yellow and rose colour, and spotted and streaked with red. Each flower is about four inches across. It is one of the finest of the Orchideæ. Each raceme contains five or six of these beautiful flowers.

## Plants noticed in Botanical Register, but not figured.

Cestrum aurantiacum.—A beautiful flowering greenhouse shrub, seeds of which were sent from Guatemala by Mr. Skinner to the London Horticultural Society's Gardens, where the plant has bloomed. The flowers are produced in spikes, of a beautiful rich orange colour; each flower is an inch long, and continues in bloom for a long period. It will be a favourite for exhibiting at the floral shows, and deserves a place in every greenhouse.

Maxillaria scabrilinguis.—Mr. Hartweg found it near Loxa; it has recently bloomed in the London Horticultural Society's Gardens. The flowers are of a dull purplish-yellow.

Dichæa glauca.—A curious orchideous plant from Oaxaca, in Mexico. It has bloomed with Messrs. Loddiges. The flowers are very fragrant, pure white, except a spot of yellow at the base of each division.

Habrothamnus cyaneus.—Mr. Hartweg found it on the mountains of Yangana, near Loxa; it there formed a shrub from four to six feet high. The flowers are long, produced in great profusion, in large clusters, of a rich porcelain-blue colour. It has bloomed in the Chiswick Gardens.

Galeandra cristata.—Messrs. Loddiges received this orchideous plant from Cayenne. It has the habit of G. Devoniana, but the flowers are smaller and paler.

Camarotis obtusa.—An Indian orchideæ. Flowers a dull rose-colour, with a yellow lip. It is in Mr. Bateman's collection.

Aralia macrophylla.—A native of the north of India, though it resembles A. racemosa, in structure it is much larger. The flowers are of a greenish-yellow. It is in the collection of the London Horticultural Society, and is found to be an herbaceous plant.

Bolbophyllum pileatum.—An orchideæ from Sincapore. It has bloomed with Messrs. Loddiges. It has a large ochre-coloured flower, with the labellum stained with purple, and bright yellow. It is singularly pretty.

Pilumna laxa.—An orchideæ from Guatemala, and has bloomed in the collection of George Barker, Esq., of Springfield, near Birmingham. The flowers are produced in loose erect racemes. Sepals and petals of a pale green, faintly tinged with purple. Lip cream-coloured.

Pilumna fragrans.—Discovered by Mr. Hartweg, near the city of Papayan. The flowers white, sweet-scented, with an orange-coloured spot on the lip.

### Plants noticed in Nurseries, &c.

**Gesneria macrorhiza.**—The leaves are very soft and velvetty, large. The flowers are as large and brilliant in colour as those of G. Cooperii, and produced in a similar manner. At Mr. Glendinning's of Turnham Green.

**Echites carassa.**—It is a slender twining shrub; the flowers are near the size of E. splendens, of a deeper rose, with an orange-yellow throat. It is a most beautiful flowering plant, well deserving a place in every plant stove. It is a fine plant for coiling round a trellis. It may be had at the principal nurseries.

**Diplopeltis Hugelii.**—It is a half shrubby greenhouse plant, much branched. The flowers are produced in long panicles, of a pretty pink colour. The best plan of blooming it is to pinch off the heads and induce the production of laterals; this keeps the plant bushy, and then it forms a neat profuse blooming plant. It deserves a place in every greenhouse. It is in the Tooting Nursery.

**Bignonia Chamberlaynii.**—This plant has been in fine bloom for some time at Mr. Knight's of King's-road, in the plant stove. The flowers are large, produced in profusion; of a rich yellow colour. It flourishes well in a warm greenhouse.

**Habrothamnus cyaneus.**—A plant is trained against the wall in the Horticultural Gardens at Chiswick, where it forms a shrub about five feet high. It flourishes well during the summer, but it appears likely to require some protection in severe winter. The flowers are long, tubular, of a deep violet-blue. It is a very desirable plant, either for the greenhouse or the open wall.

**Isochilus carnosæflora.**—It is a very neat looking plant, growing about half a yard high. The flowers are purple, produced in cymose racemes. It is in the collection of Messrs. Loddiges.

**Sparaxis Wattii.**—A very beautiful species, which has bloomed in the fine collection of Robert Mangles, Esq. at Sunning-hill in Berks. The surface of the flower is divided into six segments, three of them being of a rich violet colour, the others are lemon-coloured edged with violet. Like the entire tribe it deserves a place wherever it can be grown.

**Loaza lucida.**—An annual species. The flowers are about an inch across, white with bright yellow and crimson stains at the centre. It does well trained round a wire trellis in the greenhouse. At Messrs. Henderson's.

# PART III.

## MISCELLANEOUS INTELLIGENCE.

### QUERIES.

**On Herbaceous Calceolarias.**—Will some correspondent have the goodness to afford me, through the medium of your Floricultural Cabinet, some instructions for the management of herbaceous Calceolarias? I am a great admirer of that flower, and succeed pretty well with the shrubby species, but am very unsuccessful with the others. Last year I had some very handsome varieties, but they all died, one as soon as it ceased to bloom, and the others, after being divided, survived for a few weeks, and gradually fell away. I procured a fresh supply this year of fine plants from a gardener, noted for his success in Calceolarias; but I have already the mortification of seeing two of them wither and droop before they have even ceased to flower. I cannot, on close examination, discover any worm at the root, nor have I kept them too moist. Any directions, and as early as convenient, will be thankfully received, for I fear that I shall lose all my favourite flowers.

August 6, 1844. Old Steady.

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On raising Seedling Pinks, and on the Magnolia Grandiflora.—Having saved some seeds from several rather choice varieties of Pinks, I should be obliged for some hints as to raising them, and the treatment of the seedlings when up. As also by your informing me of the best means of propagating the Magnolia grandiflora. I have one very favourably situated on a south wall, which, notwithstanding all my attention, has never bloomed more than once during the many years it has been there. I suppose there is no chance of its ever doing better, and am consequently desirous of raising a young tree to supply its place.

[Sow the Pink seed immediately in a pot or pots, and let it be placed in a moderate heat till up. When the plants have five or six leaves, transplant them into pots or boxes, a little distance apart. Early in April next plant them in the open border, in a rich soil and warm situation for blooming.

The Magnolia is increased by layering, doing it in August or September. A branch or more could probably be lowered for the purpose. By grafting the kinds into the stock of another sort, either in the open ground or in a pot, that may be done now, though better early in spring. By inarching, having a branch brought down to a plant in a pot, brought near and standing on the ground, or a plant in pot being elevated and placed so as to fit the shoots to be brought in contact, in a natural position.

Plants of good size can be procured now at a trifling cost, and thus several years be gained upon waiting for a layer, &c. to supply the place of the present plant.

Has the plant grown very vigorously, or lacked moisture in summer, the shoots being weakly; medium shoots, well ripened, generally produce bloom with established plants. If very vigorous, train some more horizontal, to check the extra vigour; or if weakly, proper attention by water, or improved soil, might effect what is desired.—Conductor.]

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On blooming the Cactus.—I have had a Cactus about three years, and I cannot get it to bloom since the first year, for the leaves that came last year appear to be withering and dying; there are plenty of leaves which do not come from the bottom, but shoots from the stems of the leaves. I was advised to take it out of the pot last year and squeeze it, then to repot it in loam, which I did, but it has not bloomed, although there is a great many new leaves. I keep it in my bed-room window, where there is a thorough air (a window back and front), and it is exposed nearly south. I will thank you if you can tell me what to do with it, from my description, which I have given as plain as I can.

Being a humble mechanic, I have not the means of giving it artificial heat, but when frosty I keep it in a room where there is a fire. An answer in your next will oblige H. M.

No. 1, Queen's-place, Hackney-road.

[As soon as the plant appears to have done growing, then gradually decline giving it water, and wholly withhold for some weeks in mid-winter. On the approach of spring begin to water it, keeping it where the sun can shine upon it, and in a warm room, it will then throw it into bloom. As dust often accumulates on plants kept in rooms, it should be often washed overhead to cleanse it. There are several excellent articles in former numbers of the Cabinet on the culture of Cactuses.—Conductor.]

## REMARKS.

Out-Door Plant-Protector.—A year back I planted a quantity of the best kinds of shrubs, and in this cold part of the country (Cumberland) I judged it advisable to protect the most tender, as Magnolias, hybrid Rhododendrons, Azaleas, &c. I therefore had a quantity of covers made of straw, just as in the north we have hives for the bees constructed. Some of them were made cylindrical, two feet high; others three and four, &c. The top was made to have a lid cover, which was moveable at pleasure in mild days, &c., and returned for protection in the evening. I fixed strong stakes in the ground, which just extended, inside, to the sides of the cover; it kept them firmly placed. In April I took the protectors away, and not a plant had been injured in the least. My plants are thriving beautifully. A COUNTRY CURATE.

A DESCRIPTIVE LIST OF DOUBLE-FLOWERED ANEMONIES.—I am an admirer of this beautiful spring flower, and have sent a descriptive list of what I obtained last season, which bloomed beautiful this. CLERICUS.

Actrice, variegated.
Annette, deep scarlet.
Archduke, rosy violet.
Belle Alliance, deep purple.
Belle Diane, deep scarlet.
Belle Marie, red.
Bijou du Parade, variegated rose.
Bleu Aimable, blue
Bleu Céleste, dark blue.
Bleu Merveille, fine blue.
Brama, scarlet.
Cœur de France, red.
Comtesse, white and rose.
Cornelia, blush.
Coronation, deep red.
Cramoisie Pourpre, crimson purple.
Cramoisie Royal, red.
Diomedes, deep red.
Dorinda, white and rose.
Elegans, red.
Eros, scarlet.
Euterpe, red.
Excellentissima, rose and green.
Frederica, blush.
Fulvia, rose, agathe, and white.
Gloria Rubrorum, variegated.
Grande Duchesse de Bade, variegated.
Grotius, blue.
Guillaume Premier, crimson.
Guirlande, red.
Hampton Court, variegated.
Henrietta Sontag, deep red.
Hortulanus, red.
Jacoba von Bayern, rose and green.
Jeannette, blush.
Justitia, blue.
L'Amour, white and green.
La Beauté Suprême, scarlet.
La Moderne, deep red.
La Superbe Royale, claret.
La Victoire, deep scarlet.
La Victorieuse, red.
Lady Arden, crimson.
Lady de Grey, blue.
Lady Rose, deep rose.
Leander, rosy red.
L'Eclair, brilliant red.
Lilas Unique, lilac.
Lisette, variegated.
L'Oracle du Siècle, red and purple.
Madame Antoine, white and rose.
Madame Marmont, white variegated.
Madame Rosenthal, red,
Madeleine, white and green.
Maiden blush, blush.
Manteau, variegated.
Manteau rouge, deep rose.
Maréchal de France, blue.
Maria Christina, purple.
Maria Louisa, deep red.
Marie Stuart, variegated
Marianne, variegated rose.
Mavrocordata, blue.
Mentor, light red.
Mirabeau, red.
Mon Bijou, rose and purple.
Nestor, scarlet.
Ovidius, deep scarlet.
Pallas, red and purple.
Perle d'Hollande, variegated.
Philomela, white and purple.
Pourpre Agréable, purple.
Pretiosa, white variegated.
Prince of Wales, deep rose.
Princess Alice, white and purple.
Purperkroon, purple red.
Queen of Scots, blue.
Reine des Amazons, purple red.
Reine des Cours, red.
Reine du Monde, rose.
Rosa Mundi, variegated.
Rosalie, rosy red.
Rose Athalie, rose.
Rose d'Amour, fine red.
Rose Merveille, variegated with rose.
Rose Supérieure, rose.
Rose Unique, variegated.
Rouge Délicat, light scarlet.
Rouge Unique, scarlet.
Royal Queen, red.
Soleil d'Or. red.
Speciosissima, scarlet and white.
Surprise, blue.
Sylvia, deep red.
Talma, blue.
Thalestris, large blue.
Triomphe du Monde, scarlet.
True Blue, blue.
Turban, purple.
Vainqueur, scarlet.
Vergennes, variegated.
Venus, white and green variegated.
Victoria Regina, striped.
Waterloo, scarlet.

ON WATERING BEDS OF GERANIUMS, HELIOTROPES, &c.—Instead of doing in the evening, as heretofore, I have this season watered my beds early in the morning, and nothing can be more satisfactory. When done in the evening, a sudden check by the cold water is given to the plants, which increases till the return of the next day's warmth; this injures the blooming of the plants; apply it early in the morning, and the soil soon gets warmed. Once a-week I give what will sink six or eight inches deep, but at other waterings about two inches only. This attention has been amply repaid in the beauty of my flower garden this summer of fine dry weather. A LADY AMATEUR FLORIST.

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ON THE USING OF CHARCOAL FOR FLOWERING PLANTS, &c.—I have proved the use of charcoal in some thousands of instances with astonishing success. What led me at first to attempt it, I had observed the same effects of charcoal in woods, and as nature made use of it so successfully, it struck me I could derive benefit from it with the plants under my care. I noticed that in the wood, where there was even a yellow stiff clay, and the subsoil a rock of clay and gravel, and where what was growing there was stunted and unhealthy, when a pit of charcoal had been burned near, and the refuse, dust, &c. scattered around the comparatively barren spot became rich and luxuriant. I use it in nearly all ways and forms. I put it in bags, and place them in cisterns of water, and into manured water; I mix it amongst the earth, and drain almost every plant with it, and I am more and more fully satisfied with its purifying qualities. I therefore strongly recommend its use by all who wish to have their floral beauties in perfection. A NOBLEMAN'S GARDENER.

July 9, 1841.

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ON PRESERVING HALF-HARDY PLANTS, PELARGONIUMS, &c., DURING WINTER.—It being now the season to prepare for a young stock of Pelargoniums and other half-hardy plants for the open beds next season, it brings the subject before us of the best mode of keeping such a stock in as little space, and cheapness, as possible. Frost and damp are the things to be guarded against; therefore a cold pit, whose bottom is half a yard deep of brickbats, or some similar absorbing material, is indispensable to success; a wooden frame must be laid over that substratum, upon which the pots can be placed, or a layer of cinders upon the brickbats, and over it somewhat finer ashes to allow the pots to be placed even. There must be provision made to admit a free supply of air by ventilation at the front and back, at which openings rain will not be admitted.

If a pit be kept in a wet state, frost of course is more powerfully operative there, but to keep it dry the contrary. If there be the provision of a small fire-flue along the front, just to heat the pit for an hour or two when occasional damp prevails, it will be found very serviceable; but it ought only to be heated in the seldom cases named. A small metal stove pipe passing along the front will do quite as well as a brick flue. All possible air, I repeat, when dry must be admitted. Watering must be done sparingly; only be applied when absolutely necessary, and never apply it over the foliage. When the pit is to be dried by applying a little fire heat, take care to allow an opening at the back of the pit for the damp to escape, for if kept closed, it will only pass into the sides and ends, and on withdrawing the heat be as damp as before. If no fire flue provision, then the dampness must be remedied by admission of air.

ON THE DOUBLE ROCKET.—It now being the time for increasing this lovely sweet-flowered plant, so well meriting a place in every flower garden, I am induced to state the plan which I have for many years pursued to perpetuate so charming a plant. As soon as the plant ceases blooming, which varies a little, from the early part of August to the end thereof, I cut off the shoots, and in dry weather take care to water the plant; this induces the production of offsets. As soon as I find, by examination in the soil, that they are rooted, which is by the end of September or early in October, I separate them from the parent plant, put them three or four in a pot, or if small-sized pots, one in each; place them in a frame to get them established before winter sets in. I keep them in a cool but dry frame pit through winter, and turn them into the open bed the end of March following. By this treatment I keep a constant supply, and having a rich loamy soil, on a dry subsoil, I grow them vigorously. I have the double white and double purple kinds. CLERICUS.

# NOTICES OF NEW FLOWERS.

## FUCHSIAS.

### W. DAVENPORT.

No 1. is a good formed flower, with a rich crimson tube, rose sepals, and deep violet corolla, handsome, but too much like others out.

No. 2, lilac tube, pink sepals, much reflexed; corolla rose. A large fine flower, well deserving cultivation.

### ANON.

*A*, very light tube, nearly white; sepals pink, much reflexed; corolla rich rose. A very beautiful flower.

*B* and *C*, rich red tube and sepals; corolla crimson. Large flowers, but not distinct enough from kinds already out.

### A KENT MAN.

No. 3, pink tube, and sepals same colour with white tips; corolla rose. Very distinct and pretty. The others 1, 2, 4 and 5, are like other kinds out.

### REV. A. BRECKON.

Seedling. Flesh-coloured tube; sepals flesh with white tips; corolla rosy-red. A very distinct and beautiful flower.

## CALCEOLARIA.

### J. BARKWAY, EAST DEREHAM.

Your seedling of 1843 is a large and very beautiful flower, the rich markings in contrast with the clear ground colour render it strikingly distinct. The only defect from perfection in form is two small indentations at the lower part of the flower. It would be an acquisition to any collection.

## DAHLIAS.

### C. HIBBERT, PAISLEY.

No. 1. Bright yellow, fine-cupped petals, crown up, and of regular form. A deep, round, fine-formed flower.

### W. GOWIN, NORWICH.

Seedling. The flower is large, but the petal is defective in form, and flimsy in its character. It is not of sufficient merit to be sold out.

### LUCY.

No. 1. The tipped seedling sent is a very fine flower of its class. Ground colour rich red, tip a clear white, cupped, and well up in the centre.

No. 2. White ground with yellow edges; a beautifully distinct flower; the only deficiency is, the petal is rather flat.

## VERBENA.

### W. B.

Seedling. A beautiful rosy-vermilion, large heads, and the most fragrant one we have had in our possession. Its vigorous growth, with the profusion of flowers, give it additional recommendations.

### R. STANIFORTH.

No. 1.—Rich red, yellow eye, fine truss, but not much different from others out.

## FLORICULTURAL CALENDAR FOR NOVEMBER.

All greenhouse plants should have a free supply of air admitted, except when it is frosty. The plants should not be watered in the evening, but in the early part of the day, so that the damps may be dried up before the house is closed, as they are, during the night, prejudicial to the plants. The soil in the pots should frequently be loosened at the surface to prevent its forming a mossy or very compact state. The plants must not be watered overhead. Luculia gratissima is the finest ornament for the greenhouse and conservatory, now and through he winter.

The plants of the Cactus that have been kept in the open air during the summer may be brought to bloom successively by taking such as are desired to bloom immediately into the heat of a forcing pine-house. Other plants, to bloom afterwards, should be kept in a greenhouse protected from the frost.

Plants of the Calceolaria that have been grown in the open borders during the summer months, and now taken up and potted, should be kept in a cool frame, or cool part of the greenhouse, being careful not to give too much water; just sufficient to keep the soil moist will only be necessary. Offsets will be found rooted; take them off and pot them.

Dutch bulbs, &c., may be successfully planted this month. See articles on best modes of the culture of each, in former numbers of the CABINET. Many persons who take a delight in growing some showy Hyacinths or other bulbous plants for adorning a room or window, &c., in winter or early in spring, have been frequently disappointed by the abortiveness of some and weakness of others. This principally arises from the inability of the plant to develop itself with a rapidity equal to the quantity of moisture it imbibes on account of its upper surface being acted upon too immediately by the atmosphere, &c.; hence arises the necessity of covering the bulb. That such is a fact is evidenced by the admirable and certain success of nearly every bulb, especially Hyacinths, that is covered with about six inches of old spent bark. This or some similar light material should always be used. Even bulbs intended to bloom in glasses we prefer starting in the old bark, and then transferring them to the glasses when the shoots are about two inches long. Where such covering is not adopted, it is of advantage to have the pots or glasses kept in a dark place till the shoots are two or three inches long.

Plants of some of the Chrysanthemums that are grown in pots and taken into the greenhouse will be found to have pushed a number of suckers. If the offset are wanted for the increase of the kind, it is advisable to pinch off the tops, so as to prevent their exhausting the plant to the weakening of the flower. If the flower-buds are thinned out freely it conduces to the increased size of those left. If the offsets are not wanted, it is best to pull up the suckers entire. Attention will be required to watering, as the roots absorb much if given: give manure water occasionally. If the plant is allowed to wither, it checks the flowers, whether in bud or expanded. So much do we admire this handsome genus of flowers, that we are fully persuaded their beautiful blossoms, exhibited in form and colour, will most amply repay for any labour that may be bestowed on the plants.

Dahlia seeds is best retained in the heads as grown, spread singly where they will not be liable to mould, and kept in a dry but not too hot a situation; being thus kept in the chaff, the small seeds will not shrivel, but be kept plump. The roots must be dried well before being put away, or will be liable to rot.

Fuchsias and greenhouse plants, intended to be inured to the open air, will require to have protection at the roots, and probably, for the first winter, over the tops too, by furze branches, canvass, wicker-baskets, &c.

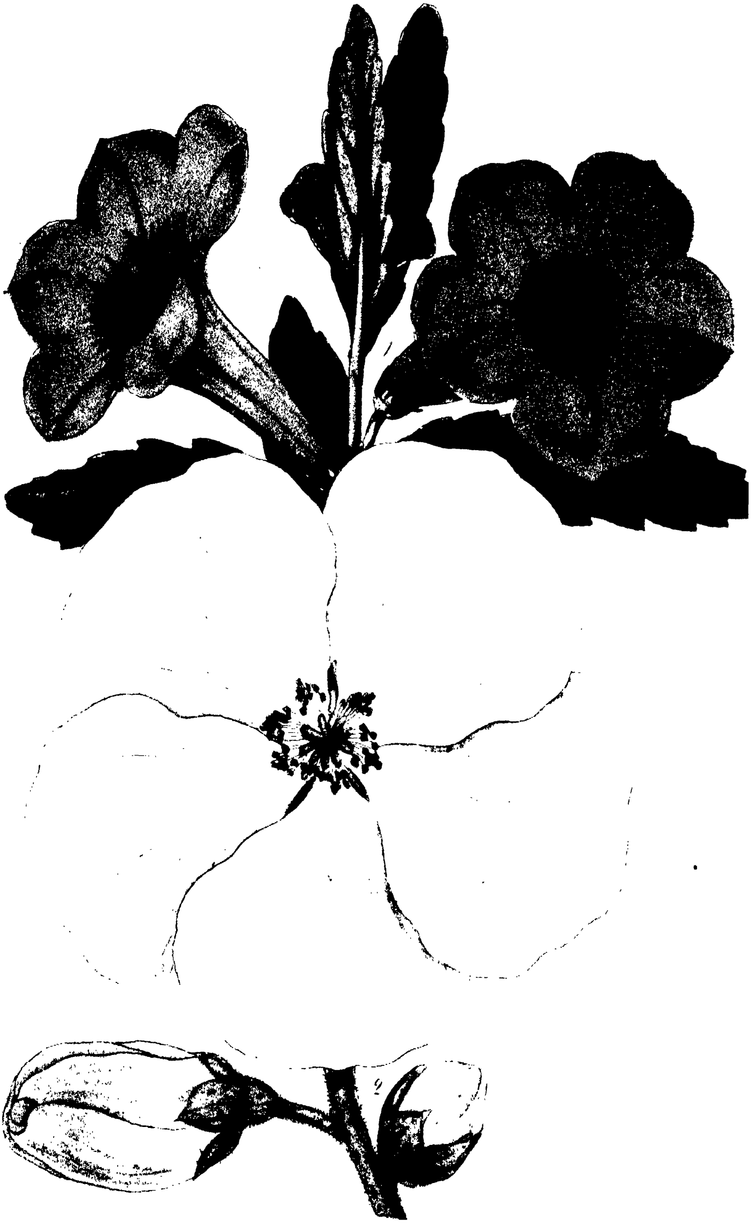
Tubers of Commellinas, and bulbs of Tigridias, should be taken up and preserved dry through winter.

Shrubs, deciduous or evergreen, may now be successfully planted. If in ex. posed situations they should be secured to stakes.

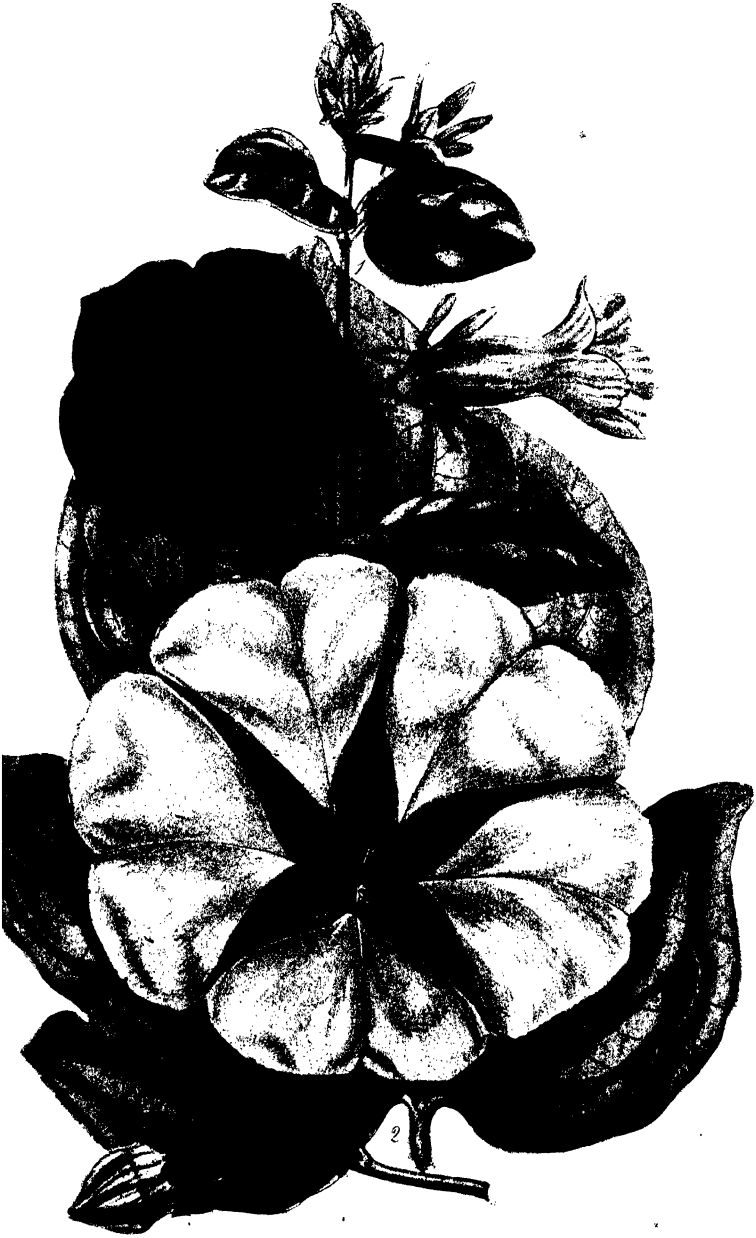
Herbaceous border plants may still be divided and re-planted.

Roses, Persian Lilacs, &c., for forcing, should now be gently forwarded, if required for bloom by Christmas. Straw or reed hurdles ought now to be prepared for covering frames, &c., in the depth of winter.

Achimenes, withhold water from till February.



1 Pterodiscus speciosus. 2. Abutilon vitifolium.



1. Petunia Nixenii. 2. Ipomæa Hardingii.

THE

# FLORICULTURAL CABINET,

DECEMBER 1st, 1844.

## PART I.

## EMBELLISHMENTS.

### ARTICLE I.

### PTERODISCUS SPECIOSUS.

This is another beautiful flowering plant, which has been introduced into this country by the Earl of Derby, and has recently bloomed in the collection at Knowsley Park gardens. It is a native of the interior of Southern Africa, and has been grown in the plant-stove at Knowsley. The root is tuberous, producing numerous branching shoots, which bloom very freely. It is a valuable acquisition, and deserves to be in every situation where it can be grown. It will be one of the prettiest plants for exhibition at the shows. Mr. Jennings speaks very highly of its beauty, and informs us it blooms in the early summer months.

### ABUTILON VITIFOLIUM.

We received a specimen of this fine flowering shrub from our friend Mr. Taylor, of Dublin, who informs us that it there grows and blooms profusely in the open border, without any winter protection. It is a native of Chili, and from a packet of seeds sent us from thence we raised several plants. We kept it in a greenhouse, and it appears likely to require such protection in the colder parts of this country. It is, nevertheless, a likely plant to be inured to the open air, and become a striking companion to the various kinds of Althæa frutex. It deserves to be grown wherever practicable.

## ARTICLE II.

### ON DESTROYING THE BROWN SCALE, AMERICAN BUG, &c.

BY ELIZABETH.

On reading the directions given in a recent number of the Cabinet, that to cover over an infected plant or tree with a coating of liquid mud I tried on some stove and greenhouse plants, as well as an apple-tree in my garden, and I find it answer everything I could wish. I found, whilst it soon suffocated the insects, it did not injure the plants in the least. I had it washed off the plants in a fortnight after applying it, and now they are flourishing finely.

## ARTICLE III.

### ON A SUBSTITUTE FOR PEAT, AND GRAFTING FUCHSIAS.

BY SCOTUS.

In answer to the query of Lincolnensis, in the Floricultural Cabinet for July, " Can any of your correspondents inform us if there is any efficient substitute for peat?" I beg leave to refer him to a pamphlet written by Mr. William M'Nab, the Superintendent of the Royal Botanic Garden of Edinburgh, published by Thomas Clarke, Edinburgh, in 1831, entitled " Hints on the Planting and General Treatment of Hardy Evergreens," where he will have an answer to his query. Mr. M'Nab is one of the best practical gardeners of the present day, and his opinions are entitled to full confidence. I send you an extract from it:—" In many places pit sand and vegetable mould, that is, the earth produced from the decayed leaves of trees or other vegetable substances, or even rotted hot-bed dung, with sand, will answer equally well, and can often be got in abundance, where peat earth is scarce and expensive." He says also,—" In good hazelly loam, without any mixture whatever, Rhododendrons, Kalmias, &c., will grow and thrive perfectly."

I formerly sent you a communication regarding the inarching Fuchsia fulgens upon F. Riccartonia, by Mr. Mercer, at Craufurd Priory Garden, in which he succeeded perfectly. I may now mention that in the spring of this year I grafted two plants of it upon F. Riccartonia, by the common method of whip-grafting, and that they both appeared to be succeeding well; one of them, however, I lost by taking off the bandage too soon, although not for about two months after the operation; the other one, however, is still flourishing, and showing flowers, which, however, are much smaller than those of F. fulgens on its own root. The plant has formed a fine head, and appears very thriving. The operation is simple and easily performed, and although the graft seems slow in uniting, does not seem likely to be unsuccessful, and it may be desirable in many cases.

## ARTICLE IV.

## ON PREPARING LAYERS AND PIPINGS OF CARNATIONS AND PINKS.

BY MR. T. CONNELLY, FLORIST, OF PRESTON, IN LANCASHIRE.

As the time of year is at hand for this work I beg to offer a few remarks, which I hope will be of some use to my brother florists. It is quite true that much has been said from time to time in the CABINET and other works, still, I trust, that fourteen years practical experience in such matters should be worth something, and not be altogether useless. Some years back, when the late Mr. Loudon was on his tour into the north, he called at our nursery, in Lancaster. I was then (the end of July) busy laying Carnations. At that time we generally bloomed about 800 pots of the best sorts. He found me at work, cutting off the tops of the layers. He asked me what I was so cutting them for; the only answer I had to make was, that my father did so before me. He pointed out the danger, and loss of time, and added, that they would root much better by leaving the tops on; and before he left, advised me to try some for my own experience in the matter, and which was done. By the end of September, I began the work of taking off the layers, and must candidly confess that I was much surprised to find those that were not cut much stronger and better rooted than the others. The next, and following years, I practised the same with PINKS, but instead of cutting away the tops of the pipings only the bottom grass was removed, and I found by the autumn that I had, as with Carnations, better and stronger than on previous years, when they had been topped and cut. Those persons who have been accustomed to cut them in the way I previously did may find it difficult, as it was with me, to leave it off; but the mode I now recommend once tried, they will find it much to their satisfaction, have better plants, and with less trouble. It would be almost needless to say anything on the compost best suited for them, as every general Carnation and Pink grower has his favourite mixture. I advise, however, wherever practicable, not to grow them more than once or twice in the same compost, a change is indispensably necessary to success. In my next, I will throw out a few hints on the taking off seed, which should be carefully attended to; it is of great value, particularly from the Lancashire sorts, and the London seedsmen will give almost any price for it, particularly if it can be warranted not mixed with any other, especially avoiding any but north country flowers.

I perceive by the last number of the CABINET that Mr. Ibbett is again in the field, and appears to be somewhat out of good temper. He sweeps all the Lancashire Pinks away at one dash with his pen, as entirely useless, and not worth cultivation. He and his friend in Northumberland, will have some difficulty to persuade the florists and their customers of the propriety of acting in accordance therewith.

## ARTICLE V.

### REMARKS ON THE RHODODENDRONS.

BY A NURSERYMAN.

OBSERVING that Rhododendrons are thought to seed themselves in woods but sparingly, I beg to inform those who wish to cultivate such plants that where they are grown in woods they are sure to sow themselves by tens of thousands. In the woods here we have, by a little attention, thousands of self-sown seedling Rhododendron ponticum, growing on any kind of soil excepting stiff clay. I find a strong soil answer better for seed than a light soil in woods, because it retains moisture in a dry season, and the small plants survive the hot weather without artificial watering. We adopt the following system in the culture of Rhododendrons in woods, which has taken place on a most extensive scale:—After a tree is cut, the stump is grubbed up, and the hole is prepared by breaking up the bottom, and widening it; leaves are then raked up and mixed with the soil until the hole is filled above the level; a plant is then inserted, and soon makes a most beautiful bush, seldom injured by either domesticated or wild animals. Rhododendron catawbiense and its varieties are far more beautiful than ponticum, and therefore should be planted near walks and the margins of woods; it is also one of the best to cross the Nepaul kinds upon, to obtain hardy varieties, which are mostly very beautiful. When in bloom, nothing can surpass the beauty of Rhododendrons in woods; last year the woods here were quite enchanting with them. It is very easy to fill woods with them by sowing the seed broad-cast, where it is desirable to have them. As soon as the capsules burst, which is about the present season, I collect the seed by shaking the boughs, placing a large sheet of paper beneath. A man and a boy can collect enough to sow acres in a few hours where plants are plentiful; a calm day should be chosen for the operation, which should be done as soon as possible after the capsules burst, and the seed should be sown immediately, Rhododendron maximum grows much better in shade than in sunny situations; the foliage is often four times the usual size, and of a much finer green; R. maximum seems to prefer loam, mixed with a great portion of leaves raked up and used immediately by mixing with the soil. Any one desirous of planting underwood, cannot find a more desirable plant than Rhododendrons, on account of their being evergreen, and forming large masses, having a delightful appearance in the most dreary winter.

## ARTICLE VI.

### REMARKS ON PLANTING RANUNCULUS, ANEMONE, HYACINTH, AND OTHER KINDS OF ROOTS, IN THE OPEN BORDER.

BY MR. LOCKHART, FLORIST, &C., CHEAPSIDE, LONDON.

Failures and disappointments in their flowering chiefly arose from the fact that amateurs, and sometimes professed gardeners, plant them too late and too shallow.

No flower root, however small, ought to be planted less than four inches deep, with the exception of the Ranunculus and the Anemone, and for the following reasons:—A flower root at four inches deep is less liable to be affected by every change of weather than one planted two or three inches deep, consequently its vegetation continues with less interruption, cold weather does not so easily check its growth, or warm weather excite it prematurely. It comes on with its own peculiar season, and flowers at its proper time. By planting early it makes good roots, and is thus better enabled to withstand adverse weather. As a general rule, large flower roots, such as the Crown Imperial, Hyacinth, Lily, and Narcissus, should be planted six inches deep, and not less.

Nothing is more simple and easy than the cultivation of the Ranunculus and the Anemone. Both ought to be planted as early in February as possible; but the beds ought to be prepared for them in November, as they do not succeed well in fresh-dug soil. Do not make composts, avoid them; but manure the common soil of the garden well, whatever that may be. The Ranunculus must be planted an inch and a half deep; the Anemone, two inches deep. Top-dress them within a week after planting (particularly when the soil is light and sandy, or where it soon becomes dry) with one inch thick of old manure, such as the remains of a Cucumber or Melon bed.

Failures in the flowering of the Ranunculus and the Anemone are nearly always owing to too artificial treatment. Admirers of these very ornamental flowers should bear in mind that they bloom in the hottest and driest months of the year, and being planted near the surface, the soil soon dries out to their roots; that the best way, therefore, to retain a proper quantity of moisture to carry out their growth, or to prevent too great evaporation of the ground, is to top-dress them, as already described.

Numerous noblemen and gentlemen have visited our Nursery at Fulham this season, and have confessed the collection to be perfectly unique, and have admired the simple and successful treatment of the various kinds.

## ARTICLE VII.

### OBSERVATIONS ON THE CULTURE OF LESCHENAULTIA FORMOSA AND BILOBA.

BY C. C. OF SOMERSET.

HAVING frequently seen plants of Leschenaultia formosa, and L. biloba, go off in the winter season, and according to my own experience, proves there must be some mismanagement, for in numberless instances they do not even survive the first winter. By proper culture, however, it can be grown to a large size, as much as from three to five feet high, and as much round, covered with a mass of bloom. In this state nothing can be more beautiful, and this may be accomplished by practising the following rules:—Having procured some healthy plants, be very careful not to give them any check; place them immediately in the greenhouse, as near the glass as possible, and give them moderate waterings. They should be potted very carefully at all times, as soon as they require it. Success depends, in a great measure, in the compost prepared for them, which should be of the following materials, well mixed together:—Take equal parts of heath mould, leaf mould, and good rich loam; and then add a fourth part of charcoal, lime rubbish, and small bits of broken pots; mix all well together, and be sure to give a good drainage at the bottom of the pot. The Leschenaultias require but moderate supplies of water in the winter, but as the season advances give it more freely. These plants should be always kept in the greenhouse, giving them a good supply of air when the weather is favourable. If these few hints should be the means of preserving any of those most beautiful plants from an early death I shall be highly gratified, and the end would be fully answered for which I forward them.

## ARTICLE VIII.

### REMARKS ON SEVERAL FLOWERS.

BY RISCEMARA, OF SUFFOLK.

Being a new subscriber, I am desirous of paying a tribute of acknowledgment to the usefulness of your periodical; for although possessed of a valuable botanical magazine from its commencement, and which is still continued, I found I could not succeed in cultivating flowers to the wished-for success, without also having the Floricultural Cabinet; and as I observe that notices of plants are acceptable, I wish to mention that the effect of large masses of the purple and white Honesty in groves is exceedingly imposing. This early flower blooms before the leaves are expanded on the trees, and the brilliant hues of the purple, with the delicate tints of the white flowers, form at the early period of the year a sight of uncommon beauty, as may be witnessed in the spring at Felixstow, in Suffolk, in a wood belonging to the marine residence lately owned by Sir Samuel Fludyer, and formerly planned and ornamented by the celebrated General Thicknesse, Governor of Landguard Fort.

I have a few queries to put respecting several subjects connected with Floriculture, and I shall be obliged by their appearing in the CABINET.

I have been growing a bed of Virginian Tobacco, which I am told is the right sort to use for fumigation, but I am quite at a loss how to prepare it for the purpose; it is now in flower, if any of your readers can give me directions, I shall feel much obliged; also if they can recommend me the best instrument for directing the fumigation to any plant requiring to be freed from insects; also the most approved syringe for sending water to plants, vines, &c., in a greenhouse, and where the foregoing articles can be obtained.

I have tried to cultivate Babianas in my greenhouse, but they did not flower, can they be managed successfully by only a greenhouse and hot-bed?

I am disappointed in the effect of the new annual Didiscus Cœruleus, for which I paid one shilling for a packet of seeds—it grew so straggling in a pot in the greenhouse, and out of doors its blue was not brilliant; could it be grown more compact, it would form a beautiful ornament to a greenhou in summer; any information on this subject would oblige.

## ARTICLE IX.

## ON THE TAMARISK, OR TAMARIX.

BY FLORA.

"On yon rough craig,
Where the wild tamarisk whistles to the sea blast."

H. DAVY.

THIS beautiful flexible shrub, highly ornamental for the shrubbery, is the *Myrica* and *Tamarix* of the Latins. This latter name is supposed to have been derived from the Hebrew *Tamaris (abstersio)*, on account of its abstergent qualities. It was a celebrated medicinal plant with the ancient Arabians, from whom the Latin authors seem to have borrowed their knowledge of the virtues of this plant; and the high encomiums which these Æsculapian writers bestowed on the Tamarisk induced Grindall, Archbishop of Canterbury, to introduce it into this country, as a specific in disorders of the spleen. Camden, in his Life of Elizabeth, notices that the Tamarisk was first brought into England by Archbishop Grindall; and in the Remembrances for Master S., by Richard Hakluyt, 1582, we are told, likewise, that "when this archbishop returned out of Germany he brought into this realm the plant of Tamariske from thence, and this plant he hath so increased that there be here thousands of them, and many people have received great health by this plant."

Dr. Turner writes fully on this plant, in his Herbal that was published in 1568, when it appears to have been unknown in this country; for he observes, "It may be named, in English, Tamarisk, because, as we want the bushe, so also we have no name for it in England." This author tells us, that he "saw it in diuerse landes in Italy, in an yland betwene Francolino and Wenish, in Germany, in diuerse places about the Ren, not far from Strasburg; and in Rhetia, in a stony place, som tyme of yeare used to be euerflowen with the Rhene."

Gerard notices that it grows in Germany, Spain, Italy, and in Greece, and he tells us that both species of this plant grew in his garden in 1596.

Later botanists mention it as a native plant, because Mr. Giddy and W. G. Mason, Esq., found it growing on St. Michael's Mount, Cornwall, in the year 1794, as also near Hurst Castle, Hants; and Dr. Goodenough saw it near Hastings in Sussex, but this is by no means satisfactorily proving it to be indigenous to our soil, as in all probability it sprang from cultivation in the two latter places, and from some accidental circumstance on the former spot, for it is of so easy propagation that the least sprig of it will often take root when thrown on the earth, and its not maturing its seed in this country is a sufficient proof of its foreign origin.

The Tamarisk has been frequently celebrated in the verses of the ancient poets. Homer mentions it as the tree against which Achilles laid his spear before he plunged into the Xanthus, to pursue the routed Trojans. It is introduced in the Pastorals of Theocritus, and Virgil has noticed it several times in his Eclogues. Its name may also be found in several passages of the poems of Ovid.

The Romans considered it an accursed plant, and frequently speak of it as the unhappy Tamarisk, as it was used for wreaths to put on the heads of criminals. But as a remedy for diseases of the spleen it was considered of such efficacy that drinking-cups were made out of this wood for those that laboured under this complaint, and the physicians ordered their patients to eat out of dishes formed from Tamarisk wood.

The magicians used it to impose upon the credulous by their pretended magical powers, and they ascribed qualities to this plant too much against common reason and decency to mention. Pliny mentions its use for besoms amongst the Romans.

It is found abundantly on the mountains of Dauria and Caucasus in the Russian empire, and the Russians and Tartars use a decoction of the twigs in the gout and rheumatism, and contusions of the limbs, as a fomentation; they also drink it in case of internal injury. They make handles for whips, &c., of the wood.

Dr. Smith remarked this plant in great plenty in Italy about Sinigaglia, and all along the hedges near the sea, where the sheep preferred it to every other food, never touching any other vegetable while that remained. It grows plentifully also on the coast in Algiers, as well as in Japan. In some places it grows to a tree of middle size, but in England it remains as a shrub, seldom exceeding three yards in height.

The Tamarisk thrives in bleak situations by the sea-side, where most other trees and shrubs are cut off by the blast, for the branches of this plant are so pliable that they bend without resisting the slightest gale, thus reminding us of the fable of the reed and the oak, or the lines of Hurdis:—

> "And so the storm,
> That makes the high elm couch, and rends the oak,
> The humble lily spares. A thousand blows,
> That shake the lofty monarch on his throne,
> We lesser folks feel not. Keen are the pains
> Advancement often brings. To be secure,
> Be humble; to be happy, be content."

We have few shrubs more graceful than the Tamarisk, its slender branches being covered with a chestnut-coloured bark, and garnished with very narrow leaves, lying over each other like the scales of fish, and of a fine bright-green colour. This plant is in appearance between the cypress and the common heath. Its flowers appear in July, and are produced in taper-spikes at the ends of the branches; they are very small, and set close all round the spike, of a lilac colour, with red anthers. These are succeeded by oblong, acute-pointed, three-cornered capsules, filled with small downy seeds.

When planted in the shrubbery the Tamarisk should mix with plants of broad and fixed foliage, as the laurel or holly. It is also calculated to cover the sides of hills, where it is desirable not to take off the view by taller trees; but its principal advantage over most other shrubs is in marine gardens, where it soon acquires sufficient height to protect rose-bushes and other low flowering shrubs. The Tamarisk is a deciduous tree, although when in foliage it has all the character and appearance of an evergreen shrub.

## ARTICLE X.

### REMARKS ON WHITNEY'S PREPARED CALICO.

BY MR. CHARLES SHAW, OF WORSBRO' HALL, NEAR BARNSLEY.

SEEING an inquiry in the CABINET of last month, page 247, relative to Mr. Whitney's prepared Calico, &c., I beg to add the result of an experiment which we tried during the past summer at this place.

About the middle of May we had a fig-tree out of doors which showed a nice crop of fruit, but it stood in rather a cold situation. I was very desirous of ripening the fruit, and from what Mr. Whitney had said of his composition when applied to Calico, &c., I judged a covering of it would just be the thing to aid me in realising my wishes.

I therefore procured two quart bottles of the composition, and eighteen yards of glazed Calico, which just covered the tree. After the Calico was cut in proper lengths and hemmed together, I had the outer edges bound with strong tape binding, to prevent the Calico tearing, and preserve the whole entire. When thus completed it was taken into the coach-house, very tightly stretched against some rafters, and then well saturated with the composition, applying with a painter's brush. It was then left for several days to dry.

I had some strong rafters of wood placed over the tree at two feet apart, and three feet from the wall, so as to admit of a person walking under the cover. The prepared Calico was then stretched over the surface, and being firmly secured to the rafters had a very neat appearance. The next and two following days we had strong wind and rain, which threatened the covering with destruction, we therefore, as a preventative, nailed several cross-bars over the surface, but with little benefit, as the sequel will show. The covering remained over the tree about two months, during which period we had anticipated that the fruit would have made great proficiency in growth, whereas they had diminished all away at the expiration of that time. The covering being removed from the tree, it was found to be as tender as thin brown paper soaked in water, and the entire not worth one farthing.

I beg too to observe, that the foliage of the tree after its removal, strong as it usually is, had turned quite brown, although there was an abundant circulation of air through the interior space, admitted by the top and bottom openings.

It appears, as has been remarked, that it requires a much stronger material than the glazed Calico in order to answer the desired purposes, and it is even then questionable whether it will answer the end in view by those who may adopt it.

## REVIEW.

*Observations on the Cultivation of Roses in Pots, by W. Paul; Nurseries, Cheshunt, Herts.* Published by Sherwood, Gilbert, and Piper, Paternoster-row, London. pp. 32.

This is a neat, interesting, and useful little publication, on a very pleasing subject. The author has given a minute detail of his practice, throughout the various stages of culture, in a very clear and definite manner, and a list of the preferred classes of roses, with observations on each, as well as a descriptive list of each kind of rose. It is well worth the attention of all rose fanciers, and ought to be procured by them.

We extract the following particulars, that our readers may be able to judge more satisfactorily of the merits of the work:—

### " APTITUDE OF ROSES FOR POT CULTURE.

" It appears somewhat remarkable that the idea of growing Roses in pots should not have been earlier adopted. A more magnificent genus of plants, possessed of such a combination of rare qualities, scarcely to be met with in any other, and one with regard to which the cultivator has so great a scope to exercise his skill and taste, could not be desired. If a continual succession of flowers be an estimable character of plants intended to be grown in pots, the Rose has a decided claim to our attention. If variety of colour (from white to yellow, red, or purple, with various intermediate shades,) be sought for, it is found here. If scent be valued, the Provence, Perpetual Tea-scented, and other classes, establish a claim on this point also. Their foliage, too, and general appearance is elegant; and, in fine, from the flexible nature of the young shoots, they admit of being fashioned into any form the fancy of the cultivator may suggest.

" *Duration of Bloom.*—An argument that has been advanced to prove Roses are not well suited for growing in pots, and can never become first-rate exhibition plants, is that the flowers fall so soon after expanding. This must be in part allowed ; but it must also be remembered that this is not the case with all varieties, and the autumnals are almost continually in bloom ; for, as the first flowers drop away, others open around them ; and many kinds may thus be kept in bloom, out of doors, from May till November; and, if we include in-door culture, by forcing in winter and protecting in autumn, we may have Roses in bloom nearly the whole year round. But it may appear that this continual flowering of the autumnals will eventually exhaust the plants, and cause the flowers produced late in the season to be poor and thin ; but these, though often smaller than the early ones, are frequently the finest formed ; and, by watering the plants occasionally with liquid manure, the disparity will be but trifling.

" *Advantages of growing the tender kinds in Pots.*—There are many advantages, when plants are grown in pots, of which we are not able to avail ourselves when they are growing in the open ground. With regard to the tender varieties of Roses, these are very great, if we only take into consideration the facilities afforded of protecting them from frost and heavy rains, by means of pits ; and it is not surprising to find they thrive so much better under glass than when exposed to all the changes and severities of the weather. The hardy kinds, however (except a few be introduced by way of varying the colours to a greater degree), certainly need not to be grown under glass; they merely require plunging; and an airy yet sheltered situation in the garden should be chosen.

"*Suggestion for growing Tea Roses near London.*—Hitherto the Chinese and tea-scented Roses have not been grown with much success in the immediate neighbourhood of London, nor in the north of England, when planted in the open ground. It is notorious that no collection, however small, can be complete without some portion of these Roses; and it is the vexatious disappointment alone, attendant upon their constant failure, that could have caused their growth, in certain localities, to have been given up. Doubtless, in some instances, an impure atmosphere may have caused their failing; but I humbly submit whether, if carefully examined, the soil and situation would not often propound the difficulty. The ease, then, with which we can remedy these disadvantages, when the plants are grown in pots, leads me to propose their cultivation in this way to those with whom they have not hitherto succeeded; and there is good ground to believe they will succeed well in this manner, and especially if grown under glass. Except for forcing, cold pits are perhaps preferable to a house, where they should be kept close to the glass, and plenty of air given. They should have the advantage of dews and soft showers, the lights in summer being merely used to protect them from cold nights or rough weather, and, by help of mats or canvas, from a hot sun.

"*Methods of Growth.*—Among Roses there are two distinct kinds of plants—worked plants (comprising the budded and grafted ones), and such as are grown on their own roots. Both succeed well in pots; the former, perhaps, produce the finest flowers, but should be grown on very short stocks; the latter form large and handsome plants. The greater part of the plants should be grown to bloom in the natural season, from May till November; the others, as forced Roses, blooming from March to June, which will be more particularly alluded to hereafter.

"*Transplanting and Potting.*—Early in autumn, immediately after rain, is the most favourable time to remove both worked plants and others from the ground; and such as have grown moderately, with well-ripened wood, should be chosen. The sized pots best suited are Nos. 32, 24, 16, and 12, according to the size of the plant; and they should be well drained. In potting, the soil should be pressed firmly in the pots, watering freely afterwards, through a fine rose, to settle the soil about their roots. The cultivation of the autumnals on their own roots may be commenced at any season, as they are usually kept growing in pots. If purchased in spring, in 60-sized pots, they may be immediately shifted into 48's, then plunged and watered continually, as required. Our aim being to get the plants strong, they should not be suffered to flower; and we should endeavour, through the growing season, to bring them to form a few vigorous shoots in preference to a greater number of weak ones. To accomplish this, it is advisable to rub out some of the buds when first pushing, but keeping in view the handsome formation of the plant. The plants may be shifted on through the season, and in the following spring we shall probably find them in 16 or 12-sized pots, preparing for a vigorous growth and bloom.

" *Thinning out.*—When potting, all suckers should be cut out from the worked plants, and straggling shoots shortened back to within a few eyes. Where too thick, some of the shoots may be cut out entirely. From three to ten, according to the age or growth of the plant, being in most cases sufficient. Thinning in summer, immediately after flowering, is very beneficial. The best-ripened shoots should be left, and such as stand in the best position for the well forming of the plant. The shoots left may be shortened in November and March; some at both periods, to obtain an early and late bloom.

" *Soil.*—The soil in which I have found them succeed well, and have generally used, is two parts of fresh turfy loam, broken up, but not sifted, two parts manure (road-gatherings laid by for a season, or the remains of a hot-bed not too far decomposed), and one part burnt earth. This compost should be thrown up in a heap in autumn, and turned two or three times during winter, and a little newly-slaked lime scattered throughout, to destroy worms and grubs. This is the soil used for the mass; but, for the delicate varieties (Chinese, &c.), it may be improved by the addition of one part leaf-mould or well-pulverised manure.

" *Protection.*—After potting, the plants taken from the ground should be removed to a cold pit, syringing and shading, if sunny weather, for a week or ten days. Here they soon form fresh fibrous roots, and scarcely feel their removal. It will be well if the tender varieties can be allowed to remain in the pit during winter, at which season they require scarcely any water; otherwise they should be removed to the north side of a wall or fence, and a thatch of fern, or beech boughs with the leaves on, formed; or any other mode of protection that can be more readily devised, to secure the plants from rain and frost. Indeed, it is clearly evident that the rains of autumn as seriously injure the delicate-rooted Roses as the frost in winter; for, during the mild winters of 1842–43, many of them died, which was doubtless owing to their receiving too much moisture in autumn, whereby the roots perished. Thus, then, the tender varieties may be protected from injury during winter, and the hardy ones may be removed from the pits about a month after being potted, and plunged at once in the open ground where intended to be grown and flowered.

"*Pruning.*—About the middle of November pruning may be performed, in order to effect an early bloom. The plants having been thinned out previously, all that is now required is the shortening in of the remaining shoots. It is a difficult matter to lay down any precise rules with regard to pruning, upon the judicious adaptation of which depends not only the well forming of the plant, but, in a great measure, the perfection of bloom also. In order to prune Roses with certainty of success, we ought to know the character of each plant we are about to operate on, for Roses of the same class ofttimes require very different pruning. The best criterion we can offer is, perhaps, habit of growth. Among the Hybrid Chinese, the two favourite old Roses, Brennus and Fulgens, both vigorous growers, frequently occasion great disappointment by not blooming. The failure will probably be found to arise from the method of pruning. These Roses, and others of like habit, should be well thinned out, but the shoots that are left for flowering shortened but little. Others of the same class (Hybrid Chinese), that are weak growers, may be shortened in close; such are General Allard and Lady Stuart, two beautiful and well-known Roses. There are also varieties of intermediate growth, which may be pruned in proportion. The classes Gallica, Provence, and Moss, may be pruned closer than the Hybrid Chinese. The autumnal Roses there is but little fear of pruning out of bloom; early or late, they are sure to flower. These, when grown on their own roots, should be cut down almost close to the ground, to induce them to throw up suckers from beneath, which will grow much stronger than shoots formed above ground, and flower beautifully through the summer and autumn. One point, too, should be borne in mind, that Roses, when grown in pots, may be pruned closer than when grown in the open garden. Last season I shortened back the shoots of the autumnals, Gallicas, and Provence, to within from two to four eyes; and, what with thinning and shortening, the plants looked very naked, and at first sight appeared to many to have been cut too much. But when considering that each of the remaining shoots would produce three or four, and that the plants were not in the open ground, but in pots, it was evident such was not the case; and this their after-growth and flowering fully confirmed. Some of the Hybrid Chinese, and other strong growers, were pruned close in proportion, leaving from three to six eyes on a shoot; and though the plants were young, and consequently small, their blooming, both as regards the size and the abundance of flowers, was all that could be wished.

*(To be continued.)*

## PART II.

## LIST OF NEW AND RARE PLANTS.

**Anæctochilus setaceus. The fringed flowered.** (Bot. Mag. 4123.) Orchidaceæ. Gynandria Monandria. A native of the damp woods of Ceylon. It has bloomed in the Royal Gardens at Kew; kept in the stove and covered with a bell glass, it recently flowered vigorously. The habit of the plant is that of a Goodyera. The distinct hue and marking of the leaves are exquisitely beautiful. They are of a rich velvetty green, tinged with copper, and over that it appears like golden net-work spread thereon. The lower side of the leaves is of a reddish colour, having dark yellow veins. The flower stem rises eight inches high, and each plant has several of such. The flowers are produced in short terminal spikes. Each blossom is about half an inch long, and the same across the front thereof; white, tinged with red.

**Anguloa uniflora. One-flowered.** (Bot. Reg. 60.) Orchidaceæ. Gynandria Monandria. A native of Peru, which has been imported by G. Barker, Esq., of Springfield. The plant has the habit of a Lycaste. The flower stems rise about nine inches high, each producing a single blossom, white tinged with yellow, about two inches and a half across. The plant is sweet scented.

**Aristolochia ornithocephala. Bird's Head Birth-wort.** (Bot. Mag. 4120.) Sent to the Glasgow Botanic Garden by Mr. Gardner, from Brazil. It has bloomed in the stove at the Glasnevin Botanic Garden, and proves to be a climbing shrub, with large heart-shaped leaves. The flowers are produced singly, each being about six inches across, of a dingy yellow, marked with netted lines of deep purple. The inflated tubular portion resembles a bird's head and beak. It is singularly pretty.

CHIRITA SINENSIS. CHINESE CHIRITA. (Bot. Reg. 30.) Cyrtandraceæ. Didynamia Angiospermia. Sent from China by Mr. Fortune, to the garden of the London Horticultural Society. It is a charming little greenhouse plant, requiring the treatment of a Gloxinia. The flower stems rise about five or six inches high, each having two or three blossoms. The flowers are fox-glove formed, of a beautiful lilac colour; a separate blossom is about two inches long. It is a very pretty and interesting plant, well deserving to be in every greenhouse. Mr. Fortune has been sent to China by the Horticultural Society, in order to collect plants.

ECHINOCACTUS PENTLANDI. RED-FLOWERED. (Bot. Mag. 4124.) Cacteæ Icosandria Monogynia. In the collection at the Royal Gardens of Kew. It is of a globular form. The flowers are about two inches long, of a rose-red colour.

GESNERIA GARDNERI. MR. GARDNER'S. (Bot. Mag. 4121.) Gesneriaceæ. Didynamia Angiospermia. Mr. Gardner found it on the Organ Mountains of Brazil, growing in rocky places from two to four feet high. It has bloomed in the College Botanic Garden, Dublin. The stems grow erect, herbaceous, branching. The leaves are very thick and fleshy, pale coloured, in form much like those of an elm. The flowers are produced singly, one from the axil of each leaf. Corolla is tubular, about an inch and a half long, of a bright rosy-red colour. It is a very distinct and handsome species.

HOVEA ILLICIFOLIA. HOLLY-LEAVED. (Bot. Reg. 58.) Leguminoseæ. Diadelphia Decandria. A native of the Swan River Colony, and has bloomed in the fine collection of Robert Mangles, Esq. It is a neat and interesting greenhouse shrubby plant. The flowers are rather small, of a deep violet-blue, with a white centre. It deserves a place in every greenhouse.

HYDRANGEA JAPONICA. JAPAN HYDRANGEA. (Bot. Reg. 61.) Saxifragaceæ. Decandria Trigynia. A native of Japan, in which country Siebold states there are thirteen other kinds, one of them H. Belzonii, has the habit of our common hardy shrub, H. arborescens, but has blue flowers. Another kind, H. stellata, has double flowers of a pink or light blue. The present species is a hardy shrub, requiring the same treatment as the H. hortensis, so generally grown in this country in dwelling-houses and flower borders. It grows about two feet high. Siebold states there are two varieties, one with rose-coloured flowers, and the other with blue. The one in this country is white, tinged with rose.

IPOMŒA HARDINGII. MR. HARDING'S. (Pax. Mag. Bot.) Convolvulaceæ. Pentandria Monogynia. An hybrid raised by Mr. Harding, gardener to H. Bevan, Esq., of Glynn Garth, near Beaumaris. It is stated to have been raised between I. rubro-cœrulea and I. Horsfalliæ. It is a twining herbaceous perennial, requiring a close warm greenhouse, or a stove. It grows freely and blooms profusely; the flowers are produced in clusters. Each blossom is about three inches across, of a pretty rose-colour, with rich red streaked plaits, and a very dark centre. It is a very handsome variety, deserving a place wherever practicable. It has bloomed for months in the stove at Messrs. Hendersons', of Pine-apple Nursery, London.

MYOSOTIS AZORICA. AZOREAN MOUSE-EAR, OR FORGET-ME-NOT. (Bot. Mag. 4112.) Boragineæ. Pentandria Monogynia. This very beautiful Forget-me-not is a native of the Westerly Azores, growing about waterfalls and on wet rocks in the Islands of Flores and Corvo. It grows half a yard or two feet high, blooming profusely. The flowers are of a very rich indigo-blue, and are produced for a long succession. Sir William Hooker observes that he has grown it very successfully under a hand-glass on the open border, and considers it will do without winter protection. It is also judged to be a very suitable plant for growing in a Ward's Glass-case. It well deserves to be grown wherever it is practicable.

PLATYLOBIUM PARVIFLORUM. SMALL-FLOWERED. (Pax. Mag. Bot.) A native of New Holland; and although it has been introduced into this country for some years, yet being found difficult to propagate, it is very scarce. It is an evergreen shrub, blooming very profusely in clusters of from eight to a dozen blossoms in each. The flowers are of a beautiful yellow, marked and tinged with red. Each separate blossom is about half an inch across. The plant can be kept dwarf and bushy, or be bushy and attain the height of three feet; to effect which the leads must be stopped. It thrives well in a compost of rough broken loam and peat, with a little leaf-mould added thereto. A free drainage is essential. With such treatment it is one of the nicest greenhouse ornaments. It is best propagated by layering the young ripened shoots. Messrs. Rollissons' possess the species.

Statice macrophylla. Large-leaved Thrift. (Bot. Mag. 4125.) Plumbaginea. Pentandria Pentagynia. A native of the Canary Islands, and is far superior to the Statice arborea. It is now dispersed about the country, and may be had at the principal nurseries. It thrives well in a greenhouse. The panicles of flowers are large, and their fine distinct purple and white produce a striking effect. It is a noble looking shrubby plant.

### Noticed in the Botanical Register, but not figured.

Napoleona imperialis. Mr. Whitfield has lately brought living plants of this rare and remarkable species from Sierra Leone to the Earl of Derby's, at Knowsley Park. In its native habitat it forms a smooth bush, about the size of a Camellia. The leaves are alternate, leathery, between four and six inches long. The flowers grow in threes, produced at the axils of the leaves; when fully expanded are two inches in diameter.

Napoleona was so named by De Beauvois, who first found it in woods behind the residence of the King of Oware, in Western Africa. He stated that the flowers were sky-blue, with a fine rayed pink-coloured star in the middle. Mr. Whitfield states that when they are decaying, they then assume a bluish tint. The flower, it appears, consists of three distinct rings, each of which consists of *one* petal. The first ring is an apricot colour, divided into five lobes, each of which has seven stiff ribs. The second ring is small and thin, cut into sharp pointed segments. The third ring is a rich crimson, and assumes the form of a cup, having the edge cut into fine segments. The fruit is very similar to a pomegranate, of a soft pulp, eatable, and the natives make ink from the rind.

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### Plants seen in Nurseries, &c.

Lisianthus glaucifolius. It is said to be a perennial. The plant is not near so robust as L. Russellianus. The flowers are proportionally so, of a pretty lilac-blue colour, and being produced very freely has a showy effect. It does well in the greenhouse. It has bloomed with Mr. Glendinning at Turnham Green.

# PART III.

# MISCELLANEOUS INTELLIGENCE.

## QUERIES.

On Chrysanthemums affected with Mildew.—I observe in the Floricultural Cabinet it is recommended to water plants infected with mildew with nitre dissolved in water. I beg to know, through the same medium, if the leaves can be washed with anything; my Chrysanthemums, though in full bloom, are covered with mildew. I also wish to know the cause of the leaves of Pelargoniums being at times affected with a black sticky scale like melted sugar. How am I to cure or guard against it.

[Dust the Chrysanthemums over and under the leaves with common flour sulphur. If the Pelargoniums be plunged over head in a mixture of clay and water of the consistence of cream, and this allowed to remain for a few days, then washed off by plunging in water, which is readily done, it will remedy that pest. —CONDUCTOR.]

A LIST OF SUPERIOR CHRYSANTHEMUMS.—I should be glad of a list of two dozen of the best kinds of Chrysanthemums, giving a good contrast, too, in colours. AN AMATEUR FLORIST.

[Grand Napoleon, dark purple crimson; Celestial, blush; Formosum, white and yellow; Marquis de Crequi, rosy purple; Princess Maria, light pink; Defiance, white; General Laborde, lilac; Campestroni, dark purple crimson; Princess Lamballe, rosy lilac; Vesta, white, with lilac tint; Flechier, dark rose; Louis Philippe, lilac-purple; Goliah, white and sulphur; Princess Royal, blush, with white centre; Prince of Wales, yellow edged, and tipped with red; Bianca, white and pink; Goldsmith, bright yellow; Norfolk Champion, blush, shaded with purple; Queen Victoria, bright lilac-pink; Delight, lilac-purple; Invincible, vermilion, tipped with yellow; Ne Plus Ultra, cream; Itobate, shaded-rose; Phidias, rosy-red.—CONDUCTOR.]

ON ROSES FAILING TO BLOOM, GROWING IN A STRONG LOAMY SOIL, &c.—The Editor of the CABINET will much oblige a constant reader by informing her, in the next Number, what mode of treatment should be adopted for Roses, both Standards and Dwarfs, that grow luxuriantly (in a strong loamy soil well manured), but many of which do not flower, whilst others produce an abundance of the finest blossoms from the same situation, soil, and treatment.

A SUBSCRIBER FROM THE BEGINNING.

Upminster, Essex, February 17, 1844.

[The soil and situation which is suited to one class of Roses does not suit others, this even applies to kinds in the same class. A more satisfactory reply to the question could be given if the class, or kinds, which do not flower, and situation, whether open or shaded, were furnished by our correspondent. The soil they grow in being very strong, &c., should be mixed with some light sandy loam. If the subsoil be wet, cut through some of the principal roots to induce lateral ones to push into the upper soil, and raise the border if convenient. All Rose trees like a dry subsoil, where it does not exist it ought to be made so, by stony rubbish, &c., a wet subsoil induces the production of unripened shoots, which are more or less unproductive of flowers. Well ripened shoots will produce blooming ones, and such ripened shoots should be pruned close.—CONDUCTOR.]

ON AN INSECT, WHICH AFFECTS THE CLIANTHUS AND CLEMATIS.—A subscriber encloses some leaves of the Clianthus and Clematis affected by a tiny insect, which, when examined through a microscope, appears transparent, and is indestructable by the fumes of tobacco. Will you be kind enough, through the medium of your FLORICULTURAL CABINET, to suggest a remedy? The leaves have been immersed in a decoction of Elder leaves without effect. An early answer will oblige, B. S.

Laceby Rectory.

[Camphor, in a weak degree, boiled in water with soft soap, and the plant washed therein, destroys them; but it should first be ascertained what degree the plant will bear, so as not to destroy the foliage. Try a shoot.—CONDUCTOR.]

ON CAMELLIAS AFFECTED WITH SCALE.—An amateur of the Camellia would feel obliged, by your information, as to the best method of destroying the brown scale, which so frequently are found on the plant, and are the cause of the flower-bud falling off before it blooms, and frequently when in bloom. Would also be glad to know whether the Camellias are best to be constantly kept under glass, or exposed, as other greenhouse plants, in the summer to the atmosphere.

Q.

[Clay and water to the consistence of cream applied to where the insect infests, and kept on for a week or two, will destroy them. Previously to applying it, if the plants are much infested rub off what can readily be done. If at a future time a reappearance is observed, give immediate attention to the same remedy. Shading from hot sun, and the plants kept under glass, is best, admitting a free supply of air.—CONDUCTOR.]

## REMARKS.

AN EASY WAY OF MAKING THE SEEDS OF THE CEDAR OF LEBANON GERMINATE.—M. Leroy (André), a nurseryman at Algiers, employs a much more simple and natural method of raising Cedar seeds than the common one. Instead of extracting the seeds from the cones, he plants these last entire in the soil; the seeds find in this condition a moisture suitable for their germination; they unfold themselves between the scales, of which many perish of themselves. It is easy then to remove them, for after-transplantation, either into beds, into the open ground, or into pots. This way is convenient for gardeners who are engaged in the multiplication of such trees, for it comes nearest to nature, and all the fertile seeds germinate. M. Pépin has presented to the Royal Society of Agriculture some seeds of a Cedar of Lebanon, gathered from a single tree, planted in the Garden of Plants in 1735, by Bernard de Jussieu. These seeds germinated last winter in their cones, which still attached to the tree; from the end of January every gale of wind blew down several. This premature germination was doubtless owing to the mildness and dampness of the winter. This was the first time that M. Pépin remarked this fact. The greatest part of the seeds were very much swelled, others had their radicle already extended to the length of one or two inches. The winged membrane which accompanied the seed was generally adherent. Many hundreds of those seeds collected on the ground have been sown in February, and are in as perfect a state of vegetation as those which have been since put into the ground.—*Revue Horticole.*

NEW CHRYSANTHEMUMS.—Having for several preceding years given a descriptive list of the new kinds, the following are what we have recently seen in bloom of those sent out late in 1843 and the spring of the present year. It will be observed that there is a valuable addition of dark colours, which give a very striking and pleasing contrast with the beautiful light ones which previously formed our collections. Such a lovely diversity of beautiful flowers at so late a period of the year, have especial charms, and a collection of some extent ought to be wherever they can be grown. Those grown in the open air, trained against good aspected walls, have this season bloomed beautifully, and now are very gay and ornamental.

Anne Salter, light yellow, reflexed petals, broad, and double.
Aristides, orange-brown, very double and distinct.
Annie Jean, brownish-red, very double and distinct.
Columbus, pretty rose, very double, broad petals.
Comte D'Eu, light red, very double, broad petals.
David, yellow, double.
De Crequi, in clusters, rosy-purple, very double, and very pretty.
La Superba, lilac, tasselled, pretty.
Demosthenes, yellow and brown, very double.
Duchess de Montebella, light rose, double.
Duc de Conigliana, crimson, double.
Duc de Albufera, buff, large flower.
General Laborde, in clusters, lilac, very double.
Gouvain St. Cyr, orange, very double, and pretty.
Horatio, in clusters, fine rose, very showy.
Horace, rosy-purple.
Itobate, shaded rose, very double, pretty.
Incomparable, buff, large.

**Isolier, rosy-red, in clusters.**
**Leontine, brownish-red, double, pretty.**
**Louis Philippe, purple-lilac, very double, pretty.**
**Lamarque, orange, very pretty.**
**Malvina, purple, very double, pretty.**
**Marechal Soult, yellow, pretty.**
**Queen of the Gipsies, orange-red, very double.**
**Phidias, rosy-red, very double, pretty.**
**Princess de Lamballe, in-curved, rosy-lilac, very double.**
**Sappho, reddish-brown, very double.**
**Venustum, rosy-amaranth, pretty.**
**Luxury, yellow, double, very pretty.**
**Saladin, dark orange, very pretty.**
**Competitor, salmon-rose, pretty.**
**Bertram, rosy-purple, pretty.**
**Achmet Bey, dark purple-crimson, very pretty.**
**Prince de Benevento, quilled pink, pretty.**

*(To be continued.)*

PRAIRIE ROSES.—This is a new group of Climbing Roses, which promises to be of much interest. Mr. Samuel Feast, of Baltimore, United States, has had the pleasure of raising the above-named varieties, from the seed of the single Michigan Rose, Rosa rubifolia, an American trailing briar; they are all of most robust and vigorous habits, making shoots in one season more than twelve feet in length. No, 3 is the most perfect and beautiful of the whole, giving clusters of flowers containing from twelve to twenty each; at first they are finely cupped; in a day or two they become imbricated, like those of the Duke of Devonshire. It seems to resist the hottest sunshine, and the flowers remain on the plant for a longer period than usual with any other Rose; in wet weather, however, they are not at all bright in colour, as was the case with some that bloomed the past summer; this has been named also Beauty of the Prairies. My name is that given to it by Mr. Feast. No. 2 only occasionally gives autumnal flowers. No. 1, owing to most of the imported plants dying, is more scarce than the other varieties. All these Roses are perfectly hardy; they will form fine pillars and pendulous standards.

CLOTH OF GOLD ROSE, owing to an accident to the plant left for blooming, has not flowered here this season; I saw it, however, in the commencement of last June, at Angers, in great perfection. A strong plant against a wall had produced from four to five dozen of its splendid flowers; it had made vigorous shoots the preceding season, and every bud had produced its spike of flowers, the extreme outer petals of which were of a creamy sulphur, the inner a bright and beautiful yellow; its flowers were nearly or quite as large as our common Cabbage Rose. This variety will require a south wall in this country, and, like Noisette Lamarque, it must be established one year, so as to produce some vigorous shoots; these the following season will give flowers from nearly every bud; these shoots must not, however, be shortened to any extent; four or six inches taken from the end of each will be quite sufficient. If it grows with extra vigour, so as to make shoots from twelve to fourteen feet in length, they must be trained in a serpentine form, or in any other mode, so as to avoid the necessity of shortening them. Like Lamarque, it will form a fine standard, but like that it must either be removed to a north wall, as recommended for standard Tea Roses in winter, or have its stem wound round with hay-bands, and its head protected with a prepared calico or other cap. Having introduced this Rose, I feel it my duty to give directions for its culture.

Sawbridgeworth. T. RIVERS.

ON BRUNSVIGIA JOSEPHINA.—By the following mode of treatment I never fail to bloom vigorously, every second year, the fine bulbous plant Brunsvigia Josephina; and this season the head of flowers is 10 feet round and 3 feet high. I have four bulbs, and thus secure a bloom every season. I plant it in a large well-drained pot, a 16. Keep it in a light greenhouse all the winter exposed to plenty of light; in summer remove it to a pit or frame, exposed to the sun, and kept shut. The pot stands in a pan of sand, which is kept moist. The flower-stem appears in July or August, and flowers early in September. It is then cut down, and the plant removed to the greenhouse, but by no means plunged in bottom-heat. The appearance of the leaves is delayed by flowering, so that the plant seldom completes its growth the year it flowers, as in the alternate years.

Paulownia imperialis.—This fine plant, the first brought into Europe, has bloomed for the third time in the Garden of Plants at Paris. It had 150 terminal heads, about 15 inches long, of flowers, there being from twenty to thirty blossoms in each. The plant produced a most beautiful effect, in such profusion of light blue flowers, as to be a complete bouquet. It deserves a place in every warm pleasure garden. Curator.

The Polyanthus.—Among Polyanthuses there have not been so many candidates for floral honours as among other florist flowers, consequently there are less synonymes in this class than in any other. The few that have been twice named have been done so apparently by mistake; and those few were raised by Mr. Hufton, of Nottinghamshire, well kown for having introduced many good Carnations and Picotees, as well as Polyanthuses. It is said that Mr. Clegg, of this neighbourhood, who bought the stock, named them, and that Mr. Hufton also did the same; they are known principally by the name the latter gave them, in the midland counties.

The Polyanthus has experienced less improvement than any other class of florist flower, and this is principally owing to the great sameness in seedlings to the parent from which they were raised. The following list contains the whole of the Polyanthuses cultivated in this neighbourhood; they are classed according to their merits, and are not distinguished by the colour of the ground—as dark red and scarlet.

### First Class.

Barrow's Duchess of Sutherland
Buck's George the Fourth
Bullock's Lancer
Clegg's Lord Crewe, alias George Canning
Crownshaw's Invincible
Collier's Princess Royal
Cox's Regent
Eckersley's Jolly Dragoon
Gibbon's Sovereign
General Bolivar
Fletcher's Defiance
Hilton's President
Hufton's Earl Grey, alias Clegg's Lord John Russell.
Hufton's Lord Rancliffe, alias Clegg's Prince of Orange, and Clegg's Golden Hero
Hufton's Lord Lincoln
Maude's Beauty of England
Nicholson's Bang Europe
Ollier's Beauty of Over
Pearson's Alexander
Saunders's Cheshire Favourite
Wood's Espartero
Goud's Independent

### Second Class.

Beauty of Coven
Buckley's Squire Starkie
Burnard's Formosa
Dew's Britannia
Faulkner's Black Prince
Fillingham's Tantarara
Queen's Earl Fitzwilliam
Hepworth's Elizabeth
Jolly Sailor
Nicholson's Ranger
,, Nonsuch
,, King
Sir Sydney Smith
Head's Telegraph
Turner's Emperor Buonaparte
,, Princess
Timm's Defiance, and
Yorkshire Regent.

**Cheetham Hill, Manchester.** John Slater.

## FLORICULTURAL CALENDAR FOR DECEMBER.

All greenhouse plants should have a free supply of air admitted, except when it is frosty. The plants should not be watered in the evening, but in the early part of the day, so that the damps may be dried up before the house is closed, as they are, during the night, prejudicial to the plants. The soil in the pots should frequently be loosened at the surface to prevent its forming a mossy or very compact state. The plants must not be watered overhead. Luculia gratissima is the finest ornament for the greenhouse and conservatory, now and through the winter.

The plants of the Cactus that have been kept in the open air during the summer may be brought to bloom successively by taking such as are desired to bloom immediately into the heat of a forcing pine-house. Other plants, to bloom afterwards, should be kept in a greenhouse protected from the frost.

Plants of the Calceolaria that have been grown in the open borders during the summer months, and now taken up and potted, should be kept in a cool frame, or cool part of the greenhouse, being careful not to give too much water; just sufficient to keep the soil moist will only be necessary. Offsets will be found rooted; take them off and pot them.

Dutch bulbs, &c., may yet be successfully planted. Many persons who take a delight in growing some showy Hyacinths or other bulbous plants for adorning a room or window, &c., in winter or early in spring, have been frequently disappointed by the abortiveness of some and weakness of others. This principally arises from the inability of the plant to develop itself with a rapidity equal to the quantity of moisture it imbibes on account of its upper surface being acted upon too immediately by the atmosphere, &c.; hence arises the necessity of covering the bulb. That such is a fact is evidenced by the admirable and certain success of nearly every bulb, especially Hyacinths, that is covered with about six inches of old spent bark. This or some similar light material should always be used. Even bulbs intended to bloom in glasses we prefer starting in the old bark, and then transferring them to the glasses when the shoots are about two inches long. Where such covering is not adopted, it is of advantage to have the pots or glasses kept in a dark place till the shoots are two or three inches long.

Plants of some of the Chrysanthemums that are grown in pots and taken into the greenhouse will be found to have pushed a number of suckers. If the offset are wanted for the increase of the kind, it is advisable to pinch off the tops, so as to prevent their exhausting the plant to the weakening of the flower. If the flower-buds are thinned out freely it conduces to the increased size of those left. If the offsets are not wanted, it is best to pull up the suckers entire. Attention will be required to watering, as the roots absorb much if given: give manure water occasionally. If the plant is allowed to wither, it checks the flowers, whether in bud or expanded. So much do we admire this handsome genus of flowers, that we are fully persuaded their beautiful blossoms, exhibited in form and colour, will most amply repay for any labour that may be bestowed on the plants. If seed be desired, retain the blooming stems on the plants, and keep them for some time in an airy warm situation to perfect.

Dahlia seed is best retained in the heads as grown, spread singly where they will not be liable to mould, and kept in a dry but not too hot a situation; being thus kept in the chaff, the small seeds will not shrivel, but be kept plump. The roots must be dried well before being put away, or will be liable to rot.

Fuchsias and greenhouse plants, intended to be inured to the open air, will require to have protection at the roots, and probably, for the first winter, over the tops too, by furze branches, canvass, wicker-baskets, &c.

Herbaceous border plants may still be divided and re-planted.

Roses, Persian Lilacs, &c., Honeysuckles, Rhodoras, Deutzias, Ribes, Mezereums, Correas, Gardenias, Lily of the Valley, Cinerarias, Sweet Violets, Cyclamens, Hepaticas, &c., for forcing, should now be gently forwarded, if required for bloom by Christmas. Straw or reed hurdles ought now to be prepared for covering frames, &c., in the depth of winter.

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**Petunia Nixenii.** This very strikingly beautiful Petunia, which we obtained last Autumn, and now offer, is in our Catalogue of new plants. Unlike all the previous varieties which had been denominated striped, but which, in fact, are only diversified by usual veins proceeding from the throat or tube of the flower outwards, in this kind they are distinct, and proceed from the *edge* of the corolla INWARDS. It is a real STRIPED variety, and when in profuse bloom has a very beautiful effect. It is true to its character, whether grown in a greenhouse, &c., or the open border. Having thus obtained a *real striped* kind by impregnation with others, a most beautiful new race will now be obtained.

**Ipomæa Hardingii.** This new and fine variety was raised between I. rubro cœrulea and I. Horsfallii, by Mr. Harding, gardener to H. Bevan, Esq., of Glynn Garth, near Beaumaris. It is a very beautiful variety, blooming in a warm greenhouse or moderate plant stove, in large clusters, for a long period and in vast profusion. We saw it fine at Mr. Henderson's Nursery, Edgware Road, London.

LONDON:
Printed by WILLIAM CLOWES and SONS,
Stamford Street.

THE

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THE

# FLORICULTURAL CABINET

AND

# FLORISTS' MAGAZINE.

JANUARY TO DECEMBER, 1845.

VOLUME XIII.

CONDUCTED BY JOSEPH HARRISON,

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# PREFACE.

The passing away of another Year, and the close of another Volume of the Floricultural Cabinet, necessarily imposes upon us the pleasing duty of returning our grateful acknowledgments to our Friends for the unabated support which they have continued to favour us with.

We very sensibly feel the friendliness of our supporters, which, after thirteen years of Editorial labours, is not only continued, but increasing proofs of favourable regard are constantly afforded us. This extended and substantial sanction of our Magazine has evinced that our annual promises have been most satisfactorily realized, and our labours favourably regarded.

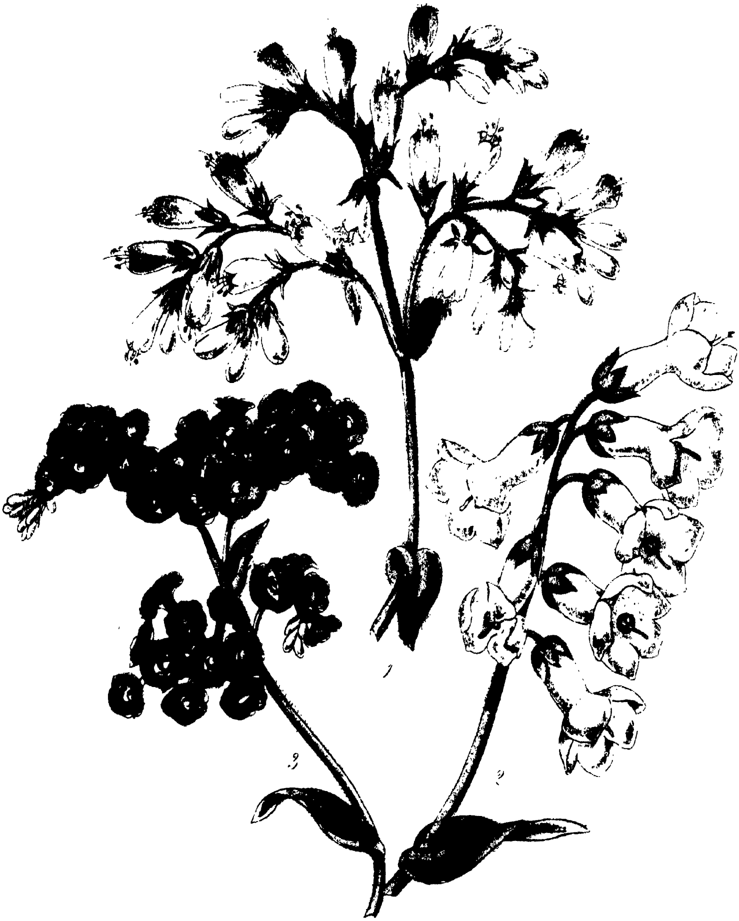
The very unprecedented sale of the Floricultural Cabinet assures us of its having a firm hold of a Floricultural public, and this is to us in the highest degree flattering.

This encouragement will excite us onward, and give a fresh impulse in increasing zeal to future duties, and in demonstrating that our gratitude to our numerous supporters is genuine, deep, abiding, and again most cordially renewed.

During the past year we have had numerous testimonies forwarded us of the improvement effected in the Volume now closing, especially so in the faithfulness and excellence of the new style of Engraving and Colouring of the Figures in our Plates, as well as of the selection of the new and best flowers given. In these respects we shall not only in future endeavour to maintain our position, but, as far as practicable, improve thereon.

Hitherto we have successfully appealed to our friends through this medium for their assistance in literary contributions, of what is deemed interesting and useful to Floriculturists. We feel assured our long faithful friends will not fail us now, and we in addition respectfully solicit the co-operation of new Contributors. With such aid we can assure our Supporters no exertion on our part shall be wanting to render the FLORICULTURAL CABINET what it is in every respect professed to be.

*Downham*;
*December* 18*th*, 1845.



1 Echium petraeum. 2 Cynoglossum longiflorum. 3 Myosotis

Floricultural Cabinet, Jan^y 1845

# THE
# FLORICULTURAL CABINET,

JANUARY 1st, 1845.

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## PART I.

## EMBELLISHMENTS.

### ARTICLE I.

### 1. ECHIUM PETRÆUM.

It is a native of Dalmatia, and flourishes well in the open border, being planted out at the end of March. It requires to be kept in a cool pit or frame during winter. It does very well if grown in a greenhouse, making a fine bushy plant there, highly ornamental. It has bloomed profusely in the greenhouse at the London Horticultural Society's garden, where we saw it in spring, a most lovely object. It is easily increased by seeds or cuttings.

### 2. CYNOGLOSSUM LONGIFLORUM.

This very beautiful flowering plant is a native of Cashmere, a hardy perennial, border flower, growing about two feet high, and blooming profusely the greater part of summer. It is a pretty ornament for the flower-garden, readily increased by seeds or offsets.

### 3. MYOSOTIS AZORICA.

This very beautiful Forget-me-not is from the Azores. We saw a specimen of it in most profuse bloom, and we were informed that the plant spreads rapidly, and blooms most profusely, forming quite a mass of its beautiful rich blue flowers. It will probably require a little winter protection in a cool frame, or a glass over it; it does well in a pot, too, in a greenhouse. It requires to be grown in a shady situation, from powerful midday sun. It deserves to be grown wherever practicable. It may soon be obtained of the principal nurserymen.

## ARTICLE II.

## THE EFFECTS OF CAMPHOR ON CUT FLOWERS, AND PLANTS GROWN IN POTS.

BY MR. CHARLES CLARK, OF LEIPSIC ROAD, CAMBERWELL, LONDON.

The stimulant effects of Camphor upon the human and some other animal bodies are well known, but those on vegetables are not only new, but very astonishing in their nature.

A tulip bloom, with two leaves on it, taken out of a stand of tulips that were apparently in the same state of health, was placed in a pint of water which had been stirred up for some time, in a *hot* state, to dissolve half an ounce of good Camphor, while the other flowers in the stand, which had the benefit of the fresh water, were quite drooping, leaves of that placed in the Camphor-water elevated themselves considerably on their footstalks, and the flower expanded more than in its natural growing state; the stamens receded from the pistillum, and the three outer leaves of the calyx, or flower-cup, were remarkably reflected back, and became extremely rigid and elastic. The internal surface of the flower perspired considerably, though a similar perspiration could not be perceived in the flowers that were in the stand of pure water, although they were in the same room, and of equal temperature.

The camphorated flowers continued in a very invigorated state for three entire days, after which they began to droop; but the leaf decayed sooner than the flower. The other flowers in the simple water did not survive half so long in a fresh state before they drooped, and on then placing them in a solution of Camphor, revived them considerably. Notwithstanding the surprising effect the Camphor so applied produced, no odour or smell of it could be traced in any part of the tulip flower or leaf, except that portion which had been immersed in the camphorated water. This circumstance seems to render it probable that the Camphor was not absorbed by the bloom, but that it exerted its remarkable influence entirely through the portion of the solid stem which was immersed.

The appearance, however, was very striking, and might be compared to the physical effects on the human constitution. Several other experiments I have made; one in particular, on the cactus tribe, using Camphor, applied as a liquid manure; the plant was of a stunted growth, and had not made much progress for the two previous years, and was to all appearance in a totally withered state: it was taken out of the pot, with as much of the earth shaken off as could be done without damaging the roots, having ready some rich mould, and a little sand impregnated with an ounce and a-half of Camphor, pounded small, was well mixed with the mould, and the plant was planted therein, slightly watered afterwards with camphorated water in a lukewarm state, then placed on a shelf, having a south aspect. In the course of three weeks the plant threw up two fine shoots, and the old stems or limbs stiffened, and became very elastic, and now are growing most vigorously. The temperature of the house is from sixty to seventy degrees.

As Camphor is very sparingly soluble in water, it is natural to conclude that the stimulant effects were produced by a very small part of the portion mingled with the water. I hope these experiments may lead to others in floriculture, tending to promote so interesting and delightful a science.

## ARTICLE III.

## OBSERVATIONS ON FLORICULTURE AND HORTICULTURE, BEING AN EXTRACT OF AN ADDRESS DELIVERED AT ST. ANDREWS, N.B., FLORICULTURAL AND HORTICULTURAL MEETING, BY THE REV. JAMES TAYLOR.

COMMUNICATED BY A NORTH BRITON.

Having had the unbounded pleasure of hearing the address delivered by the reverend gentleman above named, I feel assured it will not only be interesting to other readers of the Floricultural Cabinet, but tend in some degree to promote this truly delightful art; and with these views I forward it for insertion in the January Number. After some introductory observations, Mr. Taylor proceeds as follows:—

"I feel that I run some risk of exposing myself to the charge of presumption in undertaking to speak on the subject of gardening, in the presence of an audience so thoroughly acquainted with the art, and who have given such conspicuous proofs of the ability and success with which they have cultivated it. But as the office is one which I have not taken upon myself, and as an individual who possesses no great practical knowledge of the mysteries of a science may yet know enough of it to be able to set forth its advantages and pleasures—one point at least on which I can speak from experience—I have, without hesitation, acceded to the request made to me, that I should address you on the present occasion. The art for the promotion of which your society has been formed has been held of importance by every civilized nation in every age. It is practised alike for pleasure and for profit, and can be made subservient both to private use and enjoyment, and to public recreation and advantage. It gladdens the heart of the peasant, whose little plot may contain, as Horace Walpole expresses it, merely 'a gooseberry bush and a cabbage;' and it is numbered among the choicest luxuries of the rich and noble, whose flower-gardens, and hot-houses, and orchards, are enriched with the productions of every climate and quarter of the world. The cultivation of this pursuit is not only conducive to health and repose of mind, but, moreover, has a direct and powerful tendency to form pure and simple tastes, and to call forth and strengthen the best and noblest feelings of our nature. 'Our first most endearing and most sacred association,' observes a well-known authoress, 'are connected with gardens; our most simple and most refined perceptions of beauty are combined with them; and the very condition of our being compels us to the cares, and rewards us with the pleasures attached to them.' 'Gardening,' says Sir William Temple, 'has been the inclination of kings and the choice of philosophers.' It is associated with the names of many of the most celebrated philosophers and poets, from Bacon to Cooper and Scott, and has exercised the talents of as numerous and brilliant an assemblage of distinguished writers as any one subject can boast of. It is the delight of boyhood in every rank and condition of life, and a well known statesman, after sixty years' experience, affirms, that the love of gardens is the only passion which augments with age. The duty of 'considering' the flowers of the field is enjoined upon us by

Him who 'spake as never man spake;' and many and beautiful are the lessons which they are fitted to convey. The delicate snowdrop, the welcome messenger of spring, so pure and pale—so true an emblem of hope, and trust, and confidence, coming forth and saluting us amid the naked landscape, amidst chilling blasts and beating rain; while all its more gorgeous kindred are still slumbering in the earth—the 'yellow cowslip and the pale primrose,' associated with tender recollections of the verdant bank with its little streamlet, where we gambolled in joyous childhood and gathered flowers,

'In life's morning march, when our bosoms were young,'

and when the cares and struggles of life were as yet happily unknown—the violet, with its modest retiring beauty, and its exquisite perfume, reminding us of the pure and invigorating breezes of spring—the jessamine, 'with its dark green leaves and little silver stars,' saluting us with its delicious scent through the open casement, and bringing before our mind's eye the cottage porch with all its interesting associations—the stately lily, calling to recollection that memorable passage in the sacred volume, 'Consider the lilies of the field, how they grow; they toil not, neither do they spin; and yet I say unto you, that Solomon, in all his glory, was not arrayed like one of these'—the heartsease, the 'little western flower,' so beautifully described by our great dramatic poet—the forget-me-not, with its tender and touching associations—the pale narcissus, with its classical legend;—all of them, in short, from the rose, with its exquisite combinations of perfume, form, and colour, which have gained for it the first honours in the floral world, down to 'the meanest floweret of the vale,' speak to the taste and feelings, to the imagination and the heart, and daily read us many lessons, silent, but not less powerful, of the vanity of earthly pomp, of the beauty of heavenly simplicity and purity, of contentment and lowliness of mind. Besides the pleasure and instruction which these productions of the garden are in themselves fitted to convey, the use which has been made of them by our most admired authors has caused them to come home still more forcibly 'to our business and bosoms.' 'There has never been a poet, simple or sublime, who has not adorned his verse with these specimens of nature's cunning workmanship.' Their natural beauties have thus been greatly heightened by these acquired associations. To say nothing of innumerable other instances—what classical scholar needs to be reminded of Melenger's garland? or what reader of English poetry does not remember Milton's description of Paradise, and the many exquisite passages scattered so profusely through the works of our great dramatic poet, as to have led to some ingenious surmises that he was born and bred a gardener? or what Scotchman is not familiar with the 'Mountain Daisy,' and the 'Posie of Burns,' in which it is difficult to decide whether the natural object or the poetical application of it is the more tender and beautiful? The custom of affixing a figurative signification to those productions of nature seems to have prevailed in all ages and in all countries. In ancient times the violet was as proud a device of the Ionic Athenians as the lilies of France, or the rose of England, or the shamrock of Ireland, or 'the rough bur thistle,' with its threatening motto, is auld Scotia's 'emblem dear.' Patriotic recollections thus combine with poetical associations and natural beauty, to stimulate to the cultivation of the delightful art. 'Talk of perfect happiness or pleasure,' says old Gerarde, 'and what place was so fit for that as the garden place wherein Adam was set to be the herbalist? Whither did the poets hunt for their sincere delights but into the gardens of Alcinous, of Adonis, and the orchards of the Hesperides? Where did they dream that heaven should be put in the pleasant gardens of Elysium? Whither do all men walk for their honest recreation, but thither where the earth hath most beneficially painted her face with flourishing colours? And what season of the year more longed for than the spring, whose gentle breath enticeth forth the kindly sweets, and makes them yield their fragrant smells?' Surely it ought to require but little argument to excite to the cultivation of a pursuit thus powerfully recommended to our notice—a pursuit which tends to diffuse peace, and comfort, and contentment throughout the land; which binds together the various classes of society by a common interest, and by the interchange of kindnesses and favours; which affords healthy exercise and innocent recreation; which gives a local attachment and strengthens the love of our native land; which excites a spirit of honourable and kindly emulation, and teaches men to appreciate whatever is natural, and simple, and pure; and, above all, which leads us from 'Nature up to Nature's God;' and, while filling our minds with admiration of these the works of His hands, at the same time inspires our hearts with gratitude to Him who [redacted] now in Great Britain upwards of two hundred provincial societies, founded more or less upon its model. There are at least twenty monthly publications, and no less than three weekly newspapers devoted to horticultural subjects. Immense sums of money are now annually spent in the promotion of this, one of the purest of all human pleasures. 'The dark jungles of Hindostan, the fathomless woods of Mexico, the unapproached valleys of China,' and the boundless forests of America, are all ransacked to add to our floral treasures; and 'governments, and companies, and societies vie with men of science, and commerce, and wealth, in gladdening our British gardens with a new flower.' Our flower-gardens and hothouses are filled with the productions of every country, and of every clime. Here we see the mignionette, 'the Frenchman's darling:' there the clove and stock gilliflower, the sweetbriar, and the wallflower of our own land. Here are the mosses and lichens dragged from under the snows of Iceland; there the tenderest creepers of the tropical jungles. At one time we behold the gorgeous geranium and the fulgent fuchsia, at another—

daffodils
That come before the swallow dares, and take
The winds of March with beauty;'

Violets—

'That strew the green lap of the coming spring;'

And again, 'the flowers of middle summer'—

'Hot lavender, mint, savory marjoram,
The marygold that goes to bed with the sun,
And with him rises weeping.'

Holyhocks and dahlias, China asters and African marygolds mingle with the lily of the valley, the scented heath, and the peony rose.

At one time, our curiosity is excited by those wonderful resemblances of living creatures—the air-plant, the hare's-foot fern, and the Tartarian lamb—'the sensitive plant, which shrinks from the hand of man—the ice-plant, that almost cools one by looking at it—the pitcher-plant, with its welcome draught—the hair trigger of the stylidium—and, most singular of all, the carnivorous Venus' fly-trap;

'Only think of a vegetable being carnivorous!'

which is said to bait its prickles with something which attracts the flies, upon whom it then closes, and whose decay is supposed to afford food for the plant;'—at another, our hearts are gladdened by the sight of those universal and perpetual favourites

'That dwell beside our paths and homes.'

Fortunately, this innocent and most delightful pursuit requires the command neither of costly materials nor of unbroken leisure, to be followed with advantage and pleasure. As the love of these productions of nature is almost universal, so the opportunities of cultivating them are placed within the reach of almost all classes of society. 'Gardening,' it has been justly said, 'not only affords common ground for the high and low, but, like Christianity itself, it offers peculiar blessings and privileges to the poor man, which the very possession of wealth denies. The pale-faced mechanic or weaver may derive more real pleasure from his green bed of smoked auriculas, or his mignionette growing in a cracked teapot, than the lordly possessors of Sion or Chatsworth, from their hundreds of decorated acres, because, not only personal superintendence, but actual work is necessary for the true enjoyment of a garden. We must know our flowers as well as possess them; and the poor peasant who has the privilege of cultivating a little plot of ground, where he knows every flower, because they are few, and every name, because they are simple, whose rose-bushes and gilliflowers are dear to him because himself has pruned, and watered, and watched them, has marked from day to day their opening buds, and removed their fading blossoms,' is furnished with the means of obtaining, if not happiness, the nearest approach to, in this world, content,—

'Yes; in the poor man's garden grow
Far more than herbs and flowers;
Kind thoughts, contentment, peace of mind,
And joy for weary hours,'

In a like strain, the author of 'Human Life' beautifully says,—'I would not have my garden too extended; not because flowers are not the most delicious things, speaking to the sentiments as well as to the senses, but on account of the intrinsic and superior value of moderation. When interests are divided they are not so strong. Three acres of flowers, and a regiment of gardeners, bring no more pleasure than a sufficiency. Besides which, in the smaller possessions there is more room for the mental pleasure to step in and refine all that which is sensual. We become acquainted, as it were, and even form friendships with individual flowers. We bestow more care upon their bringing up and progress. They seem sensible of our favour, absolutely to enjoy it, and make pleasing returns by their beauty, health, and sweetness. In this respect a hundred thousand roses, which we look at *en masse* do not identify themselves in the same manner as even a very small border; and hence, if the cottager's mind is properly attuned, the little cottage garden may give him more real delight than belongs to the owner of a thousand acres. All this is so entirely nature, that give me a garden well kept, however small, two or three spreading trees, and a mind at ease, and I defy the world.' It is impossible, therefore, to view, without the greatest delight, the progress which the taste for these pure and simple pleasures is making among the working classes of the community; and we cannot but regard it as a sign of a healthy state of society when the cottager is seen rearing his sunflowers and sweet-williams before his door, and the mechanic breeding his prize-competing auriculas with as much honest pride and zeal as the nobleman can take in his hothouses and conservatories. Crabbe has given a striking description of the operation of this taste in his friend the weaver, for whom—

——'Is blooming in his rich array
The glorious flower which bore the palm away;
In vain a rival tried his utmost art;
His was the prize, and joy o'erflowed his heart;
"This, this is beauty! cast, I pray, your eyes
On this my glory! see the grace—the size!
Was ever stem so tall, so stout, so strong,
Exact in breadth—in just proportion long?
These brilliant hues are all distinct and clean,
No kindred tint, no blending streaks between;
This is no shaded, run-off, pin-eyed thing—
A king of flowers—a flower for England's king."'

William Howitt states that in the outskirts of Nottingham there are no fewer than five thousand gardens, the bulk of which are occupied by the working classes. It is impossible to over-estimate the amount of good done by these garden allotments, affording, as they do, the means of healthful employment and innocent recreation, and pure and peaceful enjoyments to the occupants and their families, and presenting in their attractions a most gratifying contrast to those noisy and demoralizing recreations in which the inhabitants of our crowded towns but too often indulge. Every lover of his species, and every enlightened patriot, must earnestly desire the extension of the system over the whole length and breadth of our country, and horticultural societies would be well entitled to encouragement and support if they had done nothing more than by giving an impulse to the cultivation of this pursuit among the poor, been the means of diffusing peace, and comfort, and contentedness among the homes of those who 'shall never cease out of the land.' "

## ARTICLE IV.

### DIRECTIONS FOR PROVIDING TENDER PLANTS TO ADORN THE FLOWER-GARDEN DURING SUMMER, &c.

BY LOUISA JOHNSTONE, OF MAY'S TERRACE, DUBLIN.

The flower-gardens are now, during the summer months, in many cases almost exclusively decorated with exotics; and too much cannot be said in favour of a practice that enables them to rival, for a time, the sun-lit scenes of happier climes, from which we have lately received many plants so perfectly suited to such a purpose, and so exquisitely lovely when displaying their beauty in masses, that without them our gardens would be a blank indeed. What, in all the range of floral beauty, unlimited as it is, could compensate us for the loss of even that single group, the Verbenas? The duration of plants used for this purpose, under the mode of culture this practice has introduced, is only annual—as they require to be propagated in autumn or spring, produce their blossoms during the season, and perish at its close. As they cannot be turned out with any certainty of success until the season is far advanced, the small plants require to be planted thick enough to cover the soil, and produce an immediate effect. Thus a moderate-sized garden requires a considerable number of plants to furnish it annually, a prospect that would have appalled even the best gardeners of yore; but at the present day, where sufficient means are allowed, the propagation of the plants is a matter of no difficulty. In cuttings, put in during February or March, failures seldom occur; when they do, they are generally the effect of too much confinement, and not, as is often assumed, of too much water. For the sort of cuttings I am speaking of, during the early part of the season, double glass is altogether unnecessary; watering them overhead during sunshine, while air is admitted, will prove of more service than covering them with glasses or shading, a practice that ought to be avoided.

The inexperienced will find a frame with a little bottom heat, covered 4 or 5 inches deep with light soil, the cuttings planted in the soil, a most efficient apparatus; and those who possess a stove or hothouse will find that cuttings in pots, plunged in the bark-bed, and fully exposed to the light, will root without further trouble.

The introduction of so many plants into the houses at a time when those wintered there are beginning to grow, and require more room, is a serious evil; to remove which as soon as possible, we are apt either to turn out the plants before the proper season, when they often suffer so much from premature exposure, that we are forced to replenish the beds, or endure their squalid appearance during half the season; or to retain the young plants, fifty or sixty together, in the cutting-pots, until they are finally turned out. This, no doubt, saves room, the labour of potting, and watering in a great measure; but it is the practice of the sluggard, and ought to be avoided with all his doings, as the plants invariably thrive better when potted singly, and allowed to establish themselves in the pots. To avoid these habits, and still retain house-room for more important purposes, select a sheltered spot, fully exposed to the sun, over which erect a temporary framework of rafters to support a roller, with canvass or matting. Cover the bottom of the space enclosed with sand. When the plants have been potted off, the pots filled with roots, and tolerably hardened, let them be taken to this shelter, carefully turned out of the pots, and each plant placed upon a small piece of turf previously placed upon the sand. As the plants are not expected to increase much in size while they remain here, they may be placed rather close together, thereby sheltering each other, and making the most of the space covered. As the plants are placed, let the space between each be filled up with sand, when they will require little attention, save an occasional watering, until they are removed to their final destination. Under such a shelter, the hardier sorts, or such as have been propagated in autumn, may be placed as early as the 1st of March; the pots, and the room in the house that they occupied, to be employed in forwarding others to be treated in the same manner. High or cutting winds, heavy rains, and cold are to be guarded against, during which the canvass must remain down.

The mere saving of room is not the only recommendation such a practice possesses. When the plants are taken up with the small piece of turf attached, it will be found that they have formed numerous strong and fleshy spongioles, ready to seize upon the soil with the greatest avidity. They likewise suffer much when taken from under glass, and exposed to the direct influence of light: placed out so early, the cause is less powerful; the effect, consequently, less felt; and what they do suffer in appearance is entirely recovered while they remain where their appearance is not of the smallest consequence. Those who possess propagating-houses, and every convenience to supply the plants required of them, may deem it unnecessary to employ such an auxiliary; but the number of such is limited indeed, when compared with those who happily take an interest in a garden, and strive to make the most of the means placed at their disposal: to those who have only a green-house it is invaluable. Persons so situated would do well to propagate as many as possible in autumn; retain them in the cutting-pots during the winter, allowing them plenty of air, as the best safeguard against damp, the greatest enemy to plants at such a season; pot them off, and place them under the shelter already recommended in spring. When judiciously managed, it is surprising how many plants may be thus produced, even by a single frame. Annuals intended for planting out in beds, for which purpose there are many sorts well adapted, ought to be sown in autumn, and treated in every respect like cuttings, when they will produce a far finer display than those raised in spring.

Specimen greenhouse plants, in pots, placed singly or in groups upon the lawn, when properly introduced, produce a fine effect. To prevent plants so placed having their roots injured by the action of the sun upon the pots, they ought to be plunged, or otherwise covered, and proper drainage secured. This is generally effected by a stratum of coal-ashes; but I have often had occasion to plunge plants where the remains of the ashes, turned up in digging, appear unsightly in the extreme: in these cases I drained the pots containing the plants by placing a small empty pot beneath each, and found the result so satisfactory, that I have adopted this plan wherever plants are plunged, it being free from every objection that applies to ashes. Pots are easier applied and removed; and more effectual, as by them worms are completely excluded. The plunging taking place when the pots required for drainage would be lying idle, they may be so applied without any sacrifice.

## ARTICLE V.

### ON PROPAGATION OF ERICAS.

BY THE FOREMAN OF A LONDON NURSERY.

OBSERVING in a late Number of the FLORICULTURAL CABINET a Correspondent asks for some information on the best mode of increasing Cape Ericas, and having, as foreman of one of the first nursery establishments in or around London, had many years' practice in the propagation of Ericas, I forward a few general instructions, which, if attended to, will ensure every desired success.

*Increase by Seed.*—Always sow in July or August, so that the young plants will be strong enough to sustain winter, but not too large, so as to become a dense mass of foliage, and thus be liable to rot. This would be the case if seed was sown much earlier in the season. Let the pot be filled up about one-third with drainage, such as broken pot and rough turfy peat in lumps; upon this, sandy peat, to about half an inch from the rim. Let the surface of the soil be made even, and as fine as possible; sow the seed regularly upon it, gently press it to the same by means of a flat piece of wood; this being done, only just cover it with the finest dusty sandy peat; if deep it will perish. Sprinkle it over with water as fine as dew, if possible, so that the seed be not washed bare; cover the top of the pot over with a flat piece of common glass; place the pot near the glass on a shelf in a greenhouse, or cool frame, shading from hot sun; keep the surface moist, not wet; protect from frost and excess of damp in winter, and gradually expose the plants, by taking off the glass when the plants are up strong enough—say half an inch. Pot off singly in the following March into small 60-sized pots, well drained, in chopped sandy peat, using a little fine to imbed the fibrous roots in when first planted.

*Increase by Cuttings.*—Have a pot drained, one-third its depth, with broken pots, over this, sandy peat, and a few bits of stone or pot intermixed; this being made even, spread over it an inch of white, or what is called silver sand, let the surface be even with the rim; after watering it the cuttings may be inserted in rows not within an inch of the side. When the cuttings are put in, water must be given, so as to settle the sand firmly round them. After being allowed an hour or so to dry, the bell-glass should be put over. It often happens that the accumulation of wet inside the glass, running down to the surface of the soil, saturates it, so that it damps off the cuttings; to avoid this I have a zinc trough made to the size of the rim of the glass, an inch deep up the inside of the glass, and half an inch outside, with a portion that bends over the rim of the pot. This frame being pressed into the sand, the glass is fixed in it; being placed, a little sand is put round the outside of the rim, keeping the inside air-tight. This trough receives the accumulating water inside the glass, and the outside rim being lower than the inside, any accumulation of water would pass over the outside of the pot. This precaution renders it unnecessary to take off the glass to wipe away the wet, which ought not to be removed, but be kept on as much as possible. The cuttings must be obtained from newly pushed shoots; these usually may be had by May; any particular late kind is readily started by placing it in a little higher temperature. When the shoots are about three-quarters of an inch pushed, cut them off close to where they recently started from in a straight cut through. A small sharp razor should be used, so that the base of the cutting is a clean cut; the lower half of the cutting must have the leaves cut off close to the stem with the razor. Care must be taken not to bruise the stem by pinching or otherwise. In inserting the cuttings the base of each must rest upon the sand, and watering will sink it around the stem. By this mode of treatment the cuttings will root in the course of three or four weeks; when well rooted they are to be taken up with all the fibrous roots possible, and be potted singly into small sixties in rough turfy sandy peat, watered, placed in a cool frame, kept close, and shaded from sun for a week, then gradually inured to more exposure.

## REVIEW.

*Observations on the Cultivation of Roses in Pots, by W. Paul Nurseries, Cheshunt, Herts.* Published by Sherwood, Gilbert and Piper, Paternoster-row, London. pp. 32.

(*Continued from page* 293.)

" *Removal of tender Varieties.*—By the end of March, if room cannot be granted them in pits or a greenhouse, the tender varieties may be brought from their hibernal residence and plunged in an airy situation; and such as were left unpruned for late flowering should now be pruned. But if allowed to remain in the pits through spring, they will bloom much earlier, in greater perfection, and with finer foliage.

" *Plunging.*—It is an excellent plan, in plunging, to place the pots so that the bottoms rest on an inverted seed-pan or flower-pot. This secures a free drainage, prevents the roots growing through the bottom of the pot into the soil, and is an effectual barrier to the ingress of worms. The pots may be plunged level with the ground, and so far apart that the plants may not touch each other when full grown. After plunging, it is beneficial to cover the surface lightly with stable manure.

" *Watering.*—Water should be given abundantly through the growing and blooming season. Guano-water is an excellent manure for Roses in pots; it should, however, be used cautiously; an ounce to a gallon of water is sufficient. If the plants require watering oftener than once a-week, pure water should be given at the intervening periods.

" *Destruction of Caterpillars, Green Fly, &c.*—When the buds first break, and continually afterwards, the plants should be keenly sought over to destroy the grub and caterpillar, some of which are mere threads in appearance, but which travel from shoot to shoot, eating out the growing points, and thereby destroying the bloom, and whose presence can scarcely be detected till the mischief is done.

The green fly is often very annoying. The most effectual way of ridding ourselves of these pests appears to be by removing the plants to a greenhouse for the time, or enclosing them, as they stand in the beds, with a covering of wet garden mats placed double, or oiled canvass, and by fumigating with tobacco.

*Disbudding, &c.*—When the buds first push, if two or three break close together, the weakest, or those taking the least favourable direction, should be rubbed out. Such shoots as are inclined to grow rank, without blooming, should be stopped or taken out, if not wanted to form the head, for they appropriate to themselves the sap which should be directed into the flower-branches, and further render the plants of uneven growth. When the flower-buds are forming imperfectly they should be nipped out; and the size of the early flowers may be increased by removing, at an early stage, the small backward flower-buds.

" *Shading.*—When the plants commence flowering, it will be necessary to shade them during the middle of the day; and the covering should be moveable, that they may have the advantage of slight rains and dews.

" *Characteristics of Varieties suited for Pot Culture.*—In searching out the following, from an immense number of varieties which I have had constant opportunities of looking over while in bloom, I have endeavoured to hold in view the following points:—1. Elegance of habit, regarding both growth and flowering. 2. Contrast of colour. 3. Abundance of bloom. 4. Form, or individual outline of flower. 5. Duration of bloom. 6. Sweetness. Probably few given will have a claim on all these points; some combine them more intimately than others. The habit of a plant is always deserving of regard, and especially when intended to be grown in a pot. As a class of Roses, the Bourbons may perhaps be given as a standard of habit. In a collection, contrast of colour is of undoubted import; and some will probably be found selected on account of their distinctness, which otherwise would not have found place here. With regard to flowering, many of our profuse blooming Roses are not the most double nor the finest in form; but the magnificent appearance they present as pot plants, when viewed *en masse*, may perhaps be considered a sufficient plea for their insertion. These, however, may be distinguished throughout the list by an asterisk being prefixed. There are various styles of Roses, each good in its way. Two points, however, (the habit of the plant and the form of the flower) should admit of universal application. By duration of bloom, allusion is more particularly made to the length of time the flowers continue in perfection when open, than to succession of flower. The Smithii (Yellow Noisette), for example, and in fact most thick-petalled Roses, hold their flowers in perfection for some days, whereas others fall almost as soon as expanded. Now, to obtain a number of flowers on one plant, in all the various stages of bloom, at a given time, is one great point the cultivator of Roses in pots for exhibition has to attend to. Therefore, both among summer and autumn Roses, such as are for some time in perfection as buds, and when expanded for some time in perfection as flowers, are certainly the most desirable. Scent, which is an estimable property of a Rose, needs no comment.

*(To be continued.)*

# PART II.

## LIST OF NEW AND RARE PLANTS.

**Anemone Obtusifolia. Dr. Govan's Anemone.** (Bot. Reg. 65.) Ranunculaceæ, Polyandria Polygynia. A native of Choor (Himalayan) Mountain, where it blooms in May. It proves to be a hardy, alpine plant, growing about six inches high, well suited for a rockwork, in a damp, shady situation, where it blooms from June to August. The flowers are produced in umbels of five or six in each, white, a separate flower, is near an inch across. It is in the collection in the garden of the Horticultural Society.

**Angulosa Clowesii, Mr. Clowes's.** (Bot. Reg. 63.) Orchidaceæ. Gynandria Monandria. Mr. Linden discovered this species in Columbia. It has bloomed in the collection of the Rev. John Clowes, of Broughton Hall, near Manchester. A plant will throw up several strong flower-stalks, each producing one flower. Each blossom is from three to four inches across, of a thick fleshy substance. Sepals and petals of a pretty light yellow, labellum white, with a tinge of yellow near the base.

**Armeria Cephalotus. Large-headed Thrift.** (Bot. Mag. 4128.) Plumbagineæ. Pentandria Pentagynia. Synonym, Statue cephalotus. This fine plant was introduced into this country in 1775, but soon lost. It is a native of several parts of Portugal and of Barbary. It has again been recently introduced from France under different names. It is probably not quite hardy enough to bear the open border in all parts of this country; but in a cool greenhouse it is a most beautiful object. The flower stems rise to from a foot to half a yard high, each having a head of blossoms about three inches in diameter, of a rich rose colour. It blooms from July to October, and deserves a place in every greenhouse. It may be had at the principal nurseries.

**Begonia Rubricaulis. Red-scaped.** (Bot. Mag. 4131.) Begoniaceæ. Monœcia Polyandria. In a former volume we gave a descriptive list of the fine collection of this interesting tribe of plants which we saw in the stove at the Royal Botanic Gardens at Kew, (see March, 1843, page 65,) to which is added the present species, obtained from the Birmingham Botanic Gardens; but Mr. Cameron, the curator, gives no account of its origin. The leaves are from four to six inches across, slightly hairy, of a bright green. The flower-stems are vigorous, and every portion of a very rich crimson-red colour, producing a brilliant effect. The flowers are produced in a branching panicle. *Male Flowers*, five petals; two are red, blush-coloured, suffused with a deeper tinge; the three others of a cream colour. Each flower is near two inches across. It is a beautiful species, deserving a place in every plant-stove.

CUPHEA STRIGULOSA. STRIGULOSE CUPHEA. (Pax. Mag. Bot.) Lythraceæ. Dodecandria Monogynia. It grows wild at the foot of the Andes Mountains, near Ibague, and has bloomed with Mr. Knight, of Chelsea, both in the stove and in the open air. It appears to be about as hardy as Salvias, Verbenas, &c., and makes a pretty shrubby plant for the open border during the entire summer season. By attention to stopping the leads of the main shoots, numerous laterals are produced, and in proportion the plant becomes bushy, and increasingly beautiful. The flowers are produced in pendulous racemes, each blossom being near an inch long. The lower half (nearest the origin) is of an orange-red, the other portion yellow, with green stripes. If grown in a sandy loam, not too rich, and in a warm situated flower-border, it will, with due treatment, be very interestingly ornamental. The flowers require to have full light.

DIPLADENIA CRASSINODA. KNOB-JOINTED. (Bot. Reg. 64.) Apocynaceæ. Pentandria Monogynia. (Synonyms, Echites carassa, E. Crassinoides.) The plant is a native of the Corcovado Mountain, near Rio Janeiro, being discovered there by Mr. Gardner. It is a stove twining plant, requiring a similar treatment to the Echites. We have noticed it on a former occasion, having seen it at Mr. Low's, of the Clapton Nursery. The flowers are produced in terminal racemes, several in each. A separate blossom, is about three inches across, of a beautiful rose colour, with a yellow eye. The fine salver-shaped flowers produce a showy effect. It well deserves a place in the plant stove. It requires to be kept rather dry in winter.

EPIDENDRUM MACROCHILUM VAR ROSEUM. ROSE-COLOURED, LARGE-TIPPED. (Pax. Mag. Bot.) Orchidaceæ. Gynandria Monandria. Within the last two years several handsome varieties, of various shades of rose-colour, but dissimilar in form, too, have been received from Guatemala, sent by Mr. Hartweg and Mr. Skinner. The present variety has bloomed at Nonesuch Park Gardens, near Cheam, in Surrey. It is chiefly remarkable from other rose-coloured varieties by having a perfectly flat surface. The flowers are produced in erect simple spikes. Sepals and petals of a dull purple, but green near their origin. Lip large, of a beautiful rosy-lilac. Each flower is near three inches across. It is a very interesting variety, well worthy a place in every collection.

GAYLUSSACIA PSEUDOVACCINIUM. BILBERRY-LIKE. (Bot. Reg. 62.) Vaccinaceæ. Decandria Monogynia. (Synonyms, Andromeda coccinea, Vaccinium Braziliense.) It is said to be a native of the sandy plains of Brazil, where it forms a shrub, growing from one to two feet high. In this country it is found to be a hardy greenhouse branching shrub, and to be treated as Cape-heaths are in soil, potting, situation, &c. The flowers are numerously produced in axillary racemes, ten to twelve in each. The younger blossoms are a beautiful orange-scarlet colour, and the older ones a rosy-red. Each flower is of a globular form, nearly half an inch across. We remarked in a former Number that we had seen the plant at Messrs. Loddiges's, and that it deserves a place in every greenhouse.

IXIOLIRIAN MONTANUM. MOUNTAIN IXIA. LILY. (Bot. Reg. 66.) Amaryllidaceæ. Hexandria Monogynia. (Synonym, Amaryllis tatarica.) Discovered on the hills in the neighbourhood of Teheran. It is a hardy bulbous plant, producing, as by the figure given, about a dozen flowers in each spike. Each separate bloom is about two inches and a half across, a rich purple-blue, with streaks of white up the middle of each of the six divisions of the corolla, which divisions reflex back in an advanced state, like the Turncap-lily. It blooms in May and June, and is a very pretty and interesting species, well deserving a place in the flower-border.

**Laplacea Semiserrata. Semiserrated-leaved.** (Bot. Mag. 4129.) Ternstræmiaceæ. Polyandria Pentagynia. A native of Brazil, where it grows to a tree of thirty to forty feet high. In the plant-stove in this country plants bloom profusely when even a foot high. The plant has much the appearance of the Green Tea-plant. The flowers are produced numerously, white, each blossom being near two inches across. It is in the collection of the Duke of Northumberland, Sion House Gardens.

**Oncidium Tricolor. Three-coloured.** (Bot. Mag. 4130.) Orchideæ. Gynandria Monandria. Sent from Jamaica to the Royal Botanic Gardens at Kew. It is a very beautiful and entirely new species, with foliage resembling that of O. Triquetrum and O. Pulchellum, but very different in the flowers, both as to form and colouring, being most elegantly varied with colours. The flower scape rises about a foot high, terminating with a much branching panicle of flowers. Each blossom is about an inch across. Sepals and petals of a yellowish green, streaked and blotched with red. Labellum white, with a yellow column streaked with red. It is a very interesting and beautiful species, well deserving a place in every collection of this class of flowers.

**Orthrosanthes Multiflora. Many-flowered.** (Pax. Bot. Mag.) Iridaceæ. Triandria Monogynia. It was discovered near Lucky Bay, in New Holland; and although it will bloom in the open border in Summer, it does best kept in the greenhouse, or cool frame. It is an herbaceous perennial, the flower-stem rising a foot high; each scape contains several flowers of a bright blue colour; each blossom is about an inch and a half across. It is a neat flowering plant, deserving a place in the greenhouse. It has bloomed at Mr. Henderson's Nursery, Edgware Road.

**Salvia Strictiflora. Erect Flowering.** (Pax. Mag. Bot.) Labiateæ. Diandria Monogynia. A native of Peru. It is a shrubby plant, requiring a similar treatment to the general species. The spikes of flowers are about five inches long; each blossom about an inch and a half, of a rich crimson red. It is a very neat and pretty species. It is in the collection of Messrs. Lee, of Hammersmith Nursery.

**Stapelia Cactiformis. Cactus-like.** (Bot. Mag. 4127.) Asclepideæ. Pentandria Monogynia. This very singular species has been lately received from Mr. Zeyhar, who sent it from Little Namagua-land, in South Africa, to the Earl of Derby, at Knowsley Park. It has bloomed in the collection at Kew. The stem, or entire plant, has the appearance of a Mammillaria (Cactus), or some succulent Euphorbia. The flowers are produced on the summit of the plant, in form like the common Stapelias, of a yellow green, striped beautifully with blood-red; the summit being crowned with several of these beautiful flowers, give it a very interesting appearance.

**Tetratheca Hirsata. Hairy.** (Bot. Reg. 67.) Tremandraceæ. Octo-Decandria Monogynia. From the Swan River Colony. It is a very neat greenhouse, shrubby plant; the foliage about the size of Pimelea decussata. It branches numerously, and produces a profusion of its pretty starry flowers. Each blossom is about an inch across, of a beautiful rosy pink, with blood-coloured centre. It grows very freely, and is readily propagated. It deserves to be in every greenhouse. It may now be had at the principal nurseries.

### Plants noticed in the Botanical Register, not figured.

**Caliphruria Hartwegiana.**—This perennial Amaryllidaceous plant is from New Granada. The flowers are produced in an umbel of about seven, the tubular portion of the flower green, and the other part of the corolla white.

**Habranthus Nobilis.**—This splendid species has bloomed out of doors in front of a pine-stove at Rev. F. Belfield's, Primley Hill, Torquay. Each spathe contains several flowers; tube green, limbs red, with some portion of greenish streaks outside, and whitish inside the flower.

. **Meridensis.**—This plant was discovered on the snowy mountains of Merida. The flowers are of a yellow and buff, prettily spotted.

**Bellevallia Syriaca.**—Bulbs were received from Aleppo by the Hon. W. F. Strangways. It has bloomed at Spofforth. Tube pale blue, limb whitish beneath, reddish above.

**Gladiolus Festivus.**—A Cape species, now in the Kew collection. Tube white, limb pale rose, suffused with streaks of pale yellow.

**Plantia Flava.**—A pretty little plant, named after our friend, Mr. Joseph Plant, florist, of Cheadle. It was raised from Cape seed at Spofforth, the packet being named Sisyrinchium Spec. Involucre of four pretty pale yellow flowers.

**Bidwellia Glaucescens.**—A native of an elevated portion of table-land, termed New England, on the south-eastern mountains of Australasia. It is of the Asphodelia section of plants. Flowers striated with white and red.

**Leochilus Herbaceus.**—An orchideous plant, from La Guayra. It has been introduced to this country by George Wailes, Esq., of Newcastle. Sepals and petals green, with a single red stripe up the middle; lip white, tinged with green and banded with purple. The plant is of small size.

**Leochilus Sanguinolentus.**—Mr. Barker received this, too, from La Guyara. The flowers are small, but very handsome, having a deep crimson lip richly studded with clear purple spots.

**Epidendrum Ceratistes.**—From the Spanish Main. Mr. Hartweg sent it to the London Horticultural Society. The panicle is about three feet long, and the flowers of a clear green with a whitish lip; they are very similar to those of E. Selligerum.

**Phycella Obtusa.**—From Peru. The umbel contains six flowers; base of the tube flesh-colour, the rest part green.

### New Plants seen at Nurseries, &c.

**At Messrs. Low and Co.**—In the stove and greenhouse we noticed the following new and fine plants:—Bouvardia strigosa; Lisianthus longifolia; Echites carassa; Allamanda grandiflora; Portlandia hexandra; Ruellia elegans; Cuphea strigolosa; Reevesia thrysoidea; Veronica salicifolia; Cestrum aurantiacum; Scutellaria, said to be a blue-flowered species; Budlea Lindleyana, the flowers are blue; Salvia alba, flowers white; Tacsonia sempervirens, and T. pinnata,—these are from California, and are stated to be hardy species; Achimenes alba, a white-flowered species; Ilex excelsior, from the Himalayan Mountains, quite hardy, a very beautiful and noble species; Ardisia Mexicana, a very noble-looking plant, the foliage being as large as a moderate-sized Magnolia grandiflora; Ipomæa Broadleyana, an hybrid, raised between I. rubrocœrulea and I. Horsfalliæ, a very beautiful hybrid; Oldenlandia Deppei, from the Cape,—the flowers are white, like those of the white jasmine, Jasminium grandiflorum; Chorozema, a new species, having a soft, hairy foliage, very delicate and neat; Brachysema villosa, a noble-looking plant, very superior in appearance to any of the other species; Dryandra bipinnatifida, very pretty foliage.

# PART III.

## MISCELLANEOUS INTELLIGENCE.

### QUERIES.

**On Culture of the Cape Jasmine.**—If some Correspondent would say the best way to treat the white Cape Jasmine to get it to flower freely, the compost it requires, the winter treatment, situation, &c., it will much oblige

Halifax, Nov. 29, 1844.

A Novice.

[In a compost of equal parts sandy peat and rich loam, both from turf which has been collected and laid in a heap for several months, merely chopped up at time of potting, and having a free drainage, the plant will grow vigorously. It blooms freely when kept in a warm greenhouse, or in a gentle plant stove early in spring for a few weeks, and in June taken into the greenhouse. Keep it in a dry greenhouse during winter.—CONDUCTOR.]

ON STRELITZIA REGINÆ.—A lady who has been a Subscriber to the FLORICULTURAL CABINET from the commencement would be much obliged by being informed of the best means of propagating and managing the Strelitzia reginæ. She has a fine plant, which has been only top-dressed for five years, and now it appears capable of being parted; but her gardener, not feeling confident in his knowledge of the plant, fears to disturb it, lest he should destroy the whole. An early notice of the request will greatly oblige.

Ipswich, 1844.

[Offsets taken off with roots, and repotted, soon become established. They scarcely exhibit any alteration at the time when first separated from the parent plant, nor does the latter receive the least injury by the process. We have increased many by the same process. The plants will flourish either in a stove or a warm greenhouse, and grow in large pots or boxes, well drained, in an enriched turfy loam. They will do well either placed on a trellis over a warm flue, or plunged in a bark-pit; the latter is the better.—CONDUCTOR.]

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ON WALLFLOWERS AND STOCKS.—It will greatly oblige a great many readers of your most useful work to inform them which is the best way of protecting the Double Wallflower and Stocks from the frosts this winter, as most of us are partial to these beautiful flowers; and most of us would like to know your opinion which kinds of Stock are the finest bloomers, and which come the most double, also which is the best time to sow the seed of Stocks to bloom in the best season. It will greatly oblige to give us information in your next number.

R. H. P.

[Our correspondent has not been explicit enough as to his purposes: we beg, however, to inform him that to have early-blooming Stocks the tribe of Brompton's furnish such, and to have later the Ten Weeks'. The former are biennial, enduring two years, the latter annual, or enduring only one year. The Brompton Stocks should be sown the first week in June, and when strong enough be planted out; if to be out of doors through winter, put them off where to bloom, and protect in winter by furze branches, pricked closely round and tied together, laying four or six inches of dry leaves over the roots, and surrounded by the furze branches, to keep the leaves in proper bounds. Where there is the advantage of a cool but dry frame, some potted off at first, in small pots, and at the approach of winter placed in the frame, or the pots sunk in the ground close under a well-sheltered south-aspected wall, &c., will generally be preserved in any part of this kingdom. Such should be transplanted, entire, by the end of March, in the situations for blooming. There are a variety of colours. The Giant is a noble red one: we have seen spikes of flowers two feet long, and a separate blossom two inches across. These come into bloom, as do the other varieties, at the end of April, and continue to a late period in summer. The Annual Stocks, viz., Ten Weeks', Russian, German, &c., are of course raised by an early spring sowing, and transplanted out as early as possible; these come into bloom by the middle of June, and continue to September. There are numerous colours of these tribes, all well deserving cultivation. Wallflowers are readily preserved uninjured, in the same way as recommended to be adopted with Brompton Stocks.—CONDUCTOR.]

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ON HEARTSEASE AFFECTED WITH MILDEW.—I am a great admirer of the Heartsease, and have cultivated them for some years, but for the last three years I have experienced considerable vexation from losing several of my best kinds, from a kind of white mildew with which they have been affected, which spoils the blooms and ultimately kills the plants. I am inclined to think it is an epidemic disease, as several of my neighbours' heartsease have suffered from the same cause. Is the disease hereditary? I mean, will seedlings raised from plants affected be more likely to be attacked than others raised from plants not diseased?

From your invariable kindness in inserting the queries of correspondents, I have been induced to ask the favour of any suggestion you, or some reader, may be able to give as a remedy for the above disease, by which you will confer an obligation on many growers in this part of Kent.

Cranbrook. G. M. S.

[Dusting the plants over-head, and the under side of the foliage too, with common sulphur, we have found a perfect remedy. It costs but a trifle, and is readily done. In old stiffish soil, and confined, damp situations, the plants are liable to be affected with mildew. Each new plantation should be put in a *fresh*, well-enriched, loamy (if yellowish, the better) soil, on an open substratum. If a new plantation is made from the offsets of diseased plants, they should be well dusted with the sulphur, and planted in the manner above stated. If there should be appearances of an attack by mildew, the earliest attention to destroy it should be given, or it will rapidly spread. We hope some of the general cultivators of Heartsease will give us the results of their experience, in order more fully to meet the wishes of our correspondent. The disease is not inherent in the seed.—CONDUCTOR.]

## REMARKS.

OPEN CARNATION SHOW.—Mr. Dickson, of Brixton, has determined on having an open show of Carnations and Picotees at the Bazaar in Baker-street, Portman-square, London, similar to the splendid Dahlia Show which took place there last September; and it is hoped, in addition to the London, that the entire of the country growers will contribute on the occasion. The show, it is expected, will take place on or about July 25, 1845. DIANTHUS.

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TWELVE BEST PINKS EXHIBITED IN LONDON IN 1844.—Headley's, Duke of Northumberland; Garrett's Queen of Roses; Aker's Lord Brougham; Neville's John Dickson; Sharp's William Cobbett; Fairburn's Bob Lawrence; Willmer's Duchess of Kent; Garrett's Alpha; Hodge's Malonia; Creed's President; Willmer's Elisabeth; Coppin's Wonder; Hodge's Gem.

A LONDON AMATEUR-GROWER.

ON CLERODENDRONS.—Last August, having four strong plants of Clerodendron fragrans, (or Volkameria fragrans,) and a good plant of C. splendens, I placed the plants of fragrans around the splendens, and inarched four branches of the latter upon the former; they soon united, and grew vigorously, more so than even the parent plant, and, I doubt not, but will furnish me with extra fine specimens of this beautiful flowering climber. I think this branch of inarching weakly kinds upon more vigorous ones is not attended to as its advantages entitle it.

J. M'INTOSH.

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TO MAKE CHARCOAL.—Having used Charcoal most advantageously in various composts for growing hot plants in, as recommended in the CABINET, and in consequence of having to procure it from a considerable distance, and no person near me, that I could find, understanding how to make it, I had a lot of black Italian poplar poles, cut down a year previously, cut up into lengths of about two feet. Having placed a portion of straw and some dry sticks on a few bricks for a floor, I had the lengths of poplar placed in an erect position, and so as to form a cone. After lighting the materials, I covered the entire over with turf sods, allowing a few spaces for the escape of smoke. When the flame burst forth in any place, I put over a piece of turf, and then spread a few inches of soil over the whole, to prevent the flame bursting forth, especially doing so late at night, so as to be secure during the night. Thus I kept the heap burning several days, and accomplished my object in a quantity of good charcoal. The lightest kind of wood makes the best charcoal. J. P. STOKES.

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ON WINTER BLOOMING PLANTS.—The following handsome flowering plants have been found to bloom well in a temperature of 45 degrees, and to be a valuable addition to our dwelling-room plants; viz.:—Ardisia crenulata; Aphelandra cristata; Euphorbia jacquiniflora and E. splendens; Justicia speciosa and coccinea; Poinciania pulcherima, and the lovely blue Eranthemum pulchellum, kept in the greenhouse through the summer and autumn, and now removed into the window of a sitting-room having a southerly aspect, will bloom for several weeks.

Dec. 21st. S.

THE BANKSIAN ROSE.—This beautiful rose is often found shy of blooming. A remark upon it is inserted in a recent Number of the "Gardener's Chronicle," where it is stated that, treated by Mr. Frost, gardener to Lady Grenville of Dropmore, it annually blooms most freely. Mr. Frost states that it is customary to prune the plant in spring; but when so treated all the flowering wood is cut away, as it blooms only upon the one-year-old wood. The proper time for pruning it is midsummer, when the blooming is over; then new wood is formed in the subsequent part of the season, which will profusely bloom the following spring. Mr. Frost states that the more vigorous the plant is, and the more young wood is laid in after midsummer-pruning the finer the bloom will be, for there will be a cluster of roses at the extremity of every shoot which starts from the bosom of the leaves.

ON PLANTING EVERGREEN SHRUBS.—Observing that it was recommended in the CABINET to plant evergreen Shrubs in autumn, from the middle of October to the end of November, the earlier the better it was stated; I therefore planted a considerable number the last October, watering them at the roots when planted, and now they are growing beautifully; not a single plant even has failed.

On former occasions I have planted in spring, at the end of March or early in April, and never but with the loss of some: the cold dry easterly winds, affecting them before the roots had struck, always proved fatal. If a wet spring, then I found the Shrubs to succeed better, but I am confident early autumn planting is the best season for success to ensue—a moist atmosphere aiding the tops contributes to certain establishment. To prevent the shrubs from being loosened by the wind in autumn or winter, I secured them by tying to stakes.

AN AMATEUR.

## FLORICULTURAL CALENDAR FOR JANUARY.

GREENHOUSE.—This department should have good attendance during this month.

The herbaceous kinds of plants will require occasional waterings, but less frequent and in less quantities than the woody kinds. Succulents, as Aloes, Sedums, &c., should be watered very sparingly, and only when the soil is very dry. When water is given it should be as much as will moisten ALL the soil, where water is only given to moisten the soil an inch or two at the top and the other kept quite dry, the result is generally certain, namely, the death of the plant. The plan to be attended to is, water only when necessary, but a full supply when it is done, and water at the early part of the day so damp may be dried up before evening. Air should be admitted at all times when the weather is favourable, or the plants cannot be kept in a healthy state. When the weather is *damp*, foggy, &c., do not give air then, let a *dry* air only be admitted. If any of the Oranges, Lemons, &c., have naked or irregular heads, towards the end of the month, if fine mild weather occur, begin to reclaim them to some uniformity by shortening the branches and head shoots; by this attention they will break out new shoots upon the old wood, and form a regular head; be repotted in rich compost *in April*, reducing the old ball of earth carefully, and replacing with new soil. After shifting, it would be of great use to the plants if the convenience of a glass case could be had in which to make a dung-bed that the pots might be plunged in; this would cause the plants to shoot vigorously, both at the roots and tops. Repot Amaryllis, &c. Tender and small kinds of plants should *frequently* be examined, to have the *surface* of soil *loosened*, decayed leaves taken away; or if a portion of a branch be decaying, cut it off immediately, or the injury may extend to the entire plant and destroy it. Gloxinias, Achimenes, &c., now beginning to push, should be potted singly.

Auriculas should, at the end of the month, be top-dressed, taking off old soil an inch deep, and replacing it with new; give air freely when dry weather.

Bulbs, as Hyacinths, &c., grown in water-glasses, require to be placed in an airy and light situation when coming into bloom. The water will require to be changed every three or four days. The flower-stem may be supported by splitting a stick at the bottom into four portions, so as it will fit tight round the edge of the glass at the top. Beds of Hyacinths, will require attention if severe weather occurs, also beds of Tulips, &c.

The seed of Calceolarias should be sown at the end of the month, and be placed in a hot-bed frame, also cuttings or slips be struck, as they take root freely now. Sow Pentstemon. Seed does best sown now in pots.

Cuttings of Salvias, Fuchsias, Heliotropes, Geraniums, &c., desired for planting out in borders or beds during spring and summer, should be struck in moist heat at the end of the month, in order to get the plants tolerably strong by May, the season of planting out.

DAHLIAS.—Dahlia roots, where great increase is desired, should now be potted, or partly plunged into a little old tan in the stove, or a frame, to forward them for planting out in May. As shoots push, take them off when four or five inches long, and strike them in moist heat. *Seed*, sow at the of month.

Herbaceous Perennials, Biennials, &c., may be divided about the end of the month, and planted out where required.

HYDRANGEAS.—Cuttings of the end of the last year's wood, that possess plump buds at their ends, should now be struck in moist heat; plant one cutting in a small pot (60's).

Mignonette, to bloom early in boxes or pots, or to turn out in the open borders, should now be sown.

Rose Trees, Lilacs, Pinks, Hyacinths, Polyanthuses, Narcissus, Honeysuckles, Persian Lilacs, Primroses, Rhodoras, Persian Irises, Sweet Violets, Cinerarias, Hepaticas, Aconites, Jasmines, Azaleas, Lily of the Valley, Correas, Gardenias, Cyclamens, &c., should regularly be brought in for forcing.

TENDER ANNUALS.—Some of the kinds, as Cockscombs, Amaranthuses, &c., for adorning the greenhouse in summer, should be sown by the end of the month.

Ten-week Stocks, Russian and Prussian Stocks, &c., to bloom early, should be sown at the end of the month in pots, placed in a hot-bed frame, or be sown upon a slight hot-bed, also some other of the tender kinds, to prepare them strong for early summer blooming.

Protect the stems of tender plants with Furze branches, dry leaves, &c. The stems of tender climbing Roses are screened by such precaution.

Chrysanthemums, the heads of decayed flowers should be dried, and saved for the seed, which probably they possess, and be sown in spring and raised in a hot-bed frame.

Protect beds of Tulips, Hyacinths, &c., Carnations, Polyanthuses, Auriculas, Pinks, Pansies, &c., with Furze, Fir branches, dry leaves, &c., or, if in pots, in frames.

1. Fuchsia Harrison's Queen Victoria 2. Tropæolum 3. [illegible]

THE

FLORICULTURAL CABINET,

FEBRUARY 1st, 1845.

# PART I.

## EMBELLISHMENTS.

### ARTICLE I.

### FUCHSIA, var. QUEEN VICTORIA.

This very fine variety was raised by us last year, and of its class far exceeds any other we have seen. It is of vigorous growth, and a profuse bloomer; its beautiful waxy-white tubes, and sepals tipped with green, in contrast with the rich colour of the corolla, are very strikingly exhibited, and produce a pretty effect.

### TROPÆOLUM LOBBIANUM.

Mr. Lobb, the collector of Messrs. Veitchs', of Exeter, discovered this handsome species in Columbia, and plants of it bloomed during several months of the last summer in their nursery. It is an herbaceous twining perennial, which grows vigorously, and blooms very freely; it is one of the prettiest plants we have seen, well meriting to be a companion of the other beautiful kinds, and as it does best when trained to a wire, or similar trellis, is suited for exhibiting at the shows.

## ARTICLE II.

## OBSERVATIONS ON WHITNEY'S PREPARED CALICO, &c.

BY MR. JONES, GARDENER TO W. ROBINS, ESQ., OF HAGLEY HOUSE, NEAR STOURBRIDGE, IN WORCESTERSHIRE.

Seeing an account, in the last December number of the Cabinet, of a failure in trying to preserve a crop of Figs, by erecting a frame, covered with Whitney's prepared Calico, over a tree growing against a wall, I feel induced to state a few observations, as the paper above alluded to is written for the information of an Inquirer, but is calculated rather to depreciate its value, than convey a fair and just idea of what it may be successfully used for. I reside many miles from Shrewsbury, but I was there in August last, and hearing of Mr. Whitney's house, which he had erected, and covered with Calico prepared with his composition, I called to see it, and was exceedingly astonished to see the things in it growing so luxuriant, and looking so healthy. The house is divided into two parts, the one part is kept as a greenhouse, the other as a stove; but the greenhouse plants being chiefly out of doors, the stove was the greatest attraction, and contributed most to prove the utility of the material for horticultural purposes. It admitted a very good light into the house, and the atmosphere appeared very suitable for the growth of plants; and, according to Mr. Whitney, the temperature was more uniform than it generally is under glass structures, which may be easily accounted for, from there being fewer openings for the escape of the heated air. There were young vines, only planted in April, which had made a long and strong growth, and were then ripening their wood, and appeared all that could be desired; one of them, a black Hamburgh, bore one bunch of fruit, of a good size, and remarkably well swelled berries,—it was then in the state of colouring. Cucumber plants were growing in a pit in the house, and were bearing and looking as well as I ever saw any under glass. The pit also contained a few Pine plants, which were in the midst of a vigorous growth; as well as many other kinds of plants, which seemed quite content with their situation. A plant of Passiflora hybridæ was traversing the back part of the house, and flowering as profusely as it generally does in other suitable situations. But in respect to its durability, when put on Calico, I can say nothing, as Mr. Whitney remarked, that it required some stronger material for its reception; and has since, I believe, invented a cloth woven on purpose for the composition; and from a specimen that I have seen, it appears strong, likely to be durable, and perfectly transparent: and, although Mr. Shaw says, it is "then questionable whether it will answer the end in view," it is my opinion, that durability is all that is required further, to make it a most useful article for horticultural and floricultural purposes; and as the time will soon be here, when plant growers will require all the room they can get, and perhaps some may wish to extend it on some economical plan, if it will not be trespassing too much on time and space, I will endeavour to point out a few ways that it may be successfully made use of. Pits may be erected, the walls composed of brick, stone, turf, or even mud, with a little straw or hay mixed, to make it hang together; but mud walls should be prepared in summer, that they may get thoroughly dry before winter, they would not answer to be made now; the lights for these pits, if not covered with Whitney's patent cloth, may be covered with something stronger than Calico; if thicker, and a little darker, it will not so much matter for these purposes, and a coat of the composition put on and got dry, ready for moving some of the common and hardy greenhouse plants into, in the early part of spring, to give those that are coming into bloom a better chance and more room. All sorts of greenhouse plants will do well in these pits, if frost can be kept from them; after these plants have been removed into the open air, which will be towards the end of May, or beginning of June, these pits may be turned to good account, by putting some loose stones in the bottom, and over that sandy peat a foot thick, and planting out some of the hard wooded greenhouse plants into it, such as Boronias, Chorizemas, Pimelias, choice Azaleas, Heaths, &c. They make specimens sooner this way than any other. Give water when planted, and afterwards when required; let the lights be over them to shade them from the bright scorching sun, and to shelter them from heavy rains, and take them off all fine evenings, and let them remain off during the nights when the weather is settled fine, to receive the benefit of the dews; in autumn they can be taken up with care, and potted in good sized pots, and put to stand in the pits, until they are wanted for the other plants again. Temporary frames of the same material will do for raising tender annuals or hotbeds; also for hardening them out for the flower garden, and for striking Dahlias, and other cuttings under. To shade and shelter beds and stages of florist flowers; and for many other purposes it will be useful to the florist, as it is a good protection, and the light it admits is not so strong as to fade the colours. For covering frames in the shape of hand-glasses; for propagating under out of doors through the summer months, for this purpose they are preferable to glass; there is many ready ways to form these kind of frames, and they will soon suggest themselves to any one that sets about it.

The kitchen gardener may use this material for raising early Potatoes, Salading, &c.; for raising seeds that require protection, as well as for Cucumber and Melon frames, if not very early in the season; for the last purpose it should be as transparent as possible; and I must observe that the lights should, in all cases, have the greatest degree of elevation, or pitch of the roof, that reason will admit, so that it may dry quickly after rain; and air should be given every favourable opportunity to dry the condensed vapour of the under surface, otherwise fungus will begin to grow, and decay soon follow. This material may also be used for protecting the blossoms of wall trees, but after they have been covered for several days, or perhaps weeks, with such a covering, much greater caution is required in removing them than is generally taken, and it should, by no means, be done at once; but I have not room to say more of this at present. To use it for any of the purposes I have named will not be expensive to those who wish to try it, and then they will be able to form their own judgment as to what further use it may be applied to.

These few remarks fall far short of doing justice to the merits of Mr. Whitney's invention; but I think Mr. W. deserves, at least, the good-will of all who are interested in gardening, for the interest he has taken in endeavouring to carry out his invention, whereby to place in the hands of those who had it not before, the means of spending their leisure hours in such a favourite amusement, and also extending it to those who were already engaged in it: under these feelings I have great pleasure in contributing my testimony, of what I have seen of it, to the pages of your most useful publication. Mr. Shaw says so little of his treatment to his tree after he erected the covering, that I cannot say what was most likely to be the cause of his failure; but if he did not make use of the syringe freely every day, as well as give plenty of water to the roots, he need not be surprised at his fruit falling off, and the leaves becoming brown; if he had erected glass, and had not supplied the tree well with water, no doubt every leaf would have fallen from the tree in such a summer as the last was.

## ARTICLE III.

### REMARKS ON THE TREATMENT OF LESCHENAULTIA FORMOSA.

BY MR. J. D. WILSON, OF BECKFORD, IN GLOUCESTERSHIRE.

OBSERVING an article on the culture of Leschenaultias, by C. C., of Somerset, inserted in last December number, and although the observations are sensible, as far as they go, yet the subject does not go far enough in detail for the entire management. I have had the pleasure, for several years, of annually seeing the splendid specimens shown at the London exhibitions, and obtaining the particulars of management from the gardener who there exhibited the finest and most perfect plant of L. formosa, and having pursued the same mode of treatment most successfully with several plants, during the last two seasons, I am induced to forward the particulars of the mode of treatment pursued.

In March, 1843, having four healthy young plants growing in thirty-two sized pots, I had them potted in twenty-four's, as follows:—The compost was formed of the following proportions; viz., one-half rough turfy sandy peat, one-sixth silver sand, and the rest of rich yellow turfy loam, and a scattering of bits of charcoal. The soils had been obtained a year before in a turfy state, and been chopped up and turned two or three times. I had a drainage of broken pots, 1½ inch deep, and over them some bits of chopped sod, to prevent the compost becoming mixed with the drainage, so as to prevent a free passage for the water to filter away. I removed a portion of the old ball, and then potted the plants carefully in the compost, keeping the crown of the roots as high as the rim of the pot, so that the water drains slightly away from the stem of the plant. When this precaution is not observed the plant is somewhat liable to perish. After potting I placed the plants in a light and airy part of the greenhouse, giving a judicious attention to watering. In the last week in July I found the pots so filled with roots, that I re-potted the plants into sixteen-sized pots, keeping the balls entire. I retained them in the greenhouse till the end of August, when I placed them in a sheltered situation for about a month, to harden the shoots, and prepare them for the winter's cool temperature. During winter I had them in the coolest, but lightest, situation; as I have observed where the plants are treated with more than just kept from frost, they draw up weakly, become unsightly, and are soon damaged by wet, or other casualty. In March following I again re-potted them, as done previously, into the next larger sized pots, in which I kept them till August last, then put them into eights, in which they now are, perfect specimens of successful growth. The plants when young had nice leading shoots, I had them secured to a central stick, and thus continued the training, so that each plant forms a handsome and regular cone of branches, from the broadest at the base to the summit. Each plant is now three feet high, or a little more, above the rim of the pot. When in bloom they were one blaze of rich crimson, and most beauteous specimens, amply repaying for the attention I had given.

Thinking it advisable to have an annual stock of two new plants, in case of the decease of the old plants, I had some other young ones potted in March last, and in all other respects subsequently properly treated during the past season. I purpose continuing to pursue this course of provision, and so dispense with the old ones when they become unsightly from any casualty, or die away.

I have two plants of the delightful blue L. biloba, in course of similar treatment, and in order to render them bushy, I have stopped the leads of the shoots, excepting the central one, and they now are fine vigorous specimens.

## ARTICLE IV.

## REMARKS ON THE CULTURE OF THE RANUNCULUS.

BY MR. JAMES HAMILTON, OF ALMONDBURY, YORKSHIRE.

I HAVE been pleased to notice remarks from time to time have been inserted on the cultivation of that universally admired lovely little flower, the Ranunculus, and was pleased with the plain and sensible remarks given by Mr. Lockhart, in a recent number of this magazine. I have been a Ranunculus grower for about twenty years, and during that time have had an opportunity of ascertaining what mode of treatment is successful. The natural situation where the common wild Ranunculus flourishes, is where the soil is a light but rich yellowish loam, as is observable in the summer season, in the deep soil of the rich meadows of our own country;—a soil that is cool and moist, during the heat of summer, even to the depth of half a yard, or more, and yet the soil at the surface is of that open sandy character as not to crack; thus preventing, what is always injurious to the fibrous roots, viz., being broken by the rending of the soil that cracks during the growing season. In order to have a bed constructed of a similar character to grow mine in, I formed one, in 1830, as follows:—The first week in February I had the soil of my garden dug out to the depth of two feet; at the bottom I laid six inches of fresh turfy loam, chopped into pieces of about four inches diameter. In the preceding autumn I had a quantity of the same kind of turfy loam procured, and laid about half a yard thick in the back yard of my garden, and from the field and cow-yard I had fresh cow-dung procured, and laid upon the soil to the depth of six inches, and as soon as spread over a portion of the soil to the depth named, I had the soil under it turned over and incorporated together; and so proceeded successively till I had through winter a sufficient quantity prepared to fill up the excavation for a bed twenty four yards long. The heap was turned over several times previous to filling in the bed in February. This compost is rich, light, but cooling with the cow-dung, and being distributed particularly throughout the soil, combines to form a compost in which I have not failed a single season, since 1830, to grow and bloom the Ranunculus, unequalled by any other I have seen; and I hesitate not to assert, whoever follows the same system in preparing the bed, and the following method of planting, &c., will obtain a vigorous bloom.

In the first week of February I had the space for the bed filled up, even with the surrounding ground, with the compost, well breaking it as cast in. A week afterwards I had the surface made even, and then three inches deep of fresh sandy loam from the bank of a hedge, spread over the whole; in this I plant my roots, at six inches apart, in rows, covering them two inches deep. When the dry weather sets in I cover the surface between the plants with a mixture of half sand and half loam—this prevents the bed from cracking, and the interior of the bed being so deep with the cooling retentive compost, I have not had my plants suffer in the least degree by drought, since I adopted the system pursued, whilst at the same time I have observed others perishing by multitudes.

On taking up my roots, which are always fine, I find the fibres abound quite at the bottom of the bed. I can most strongly recommend the above as the best plan I have known practised; and as a well-bloomed collection, with their lovely and varied hues, presents one of the most interesting and pleasing sights, I trust more readers of the CABINET will be induced to cultivate, what has been denominated the most lovely of floral beauties.

## ARTICLE V.

### ON INARCHING THE MARCHIONESS OF EXETER CAMELLIA ON THE CAMELLIA RETICULATA.

BY MR. GEORGE REYNOLDS, GARDENER AT ABDALE HOUSE, FLINTSHIRE.

A FIGURE of the fine Marchioness of Exeter Camellia appearing in the CABINET several years back, and being so much pleased with it, I procured from Jersey, where it was raised, a good plant in 1840; it grew vigorously, and bloomed finely in the spring of 1841, and made a noble growth that season. Having two good plants off the very large flowering species C. reticulata, it struck me that if I inarched the Marchioness of Exeter variety upon the stock of the reticulata it would improve its size; I did so in 1842, and in 1843 the plant bloomed well, but not larger than the mother plant. It bloomed again the last season, and its blossoms were considerably larger than those on the parent plant. I am persuaded, from the success I had in the much-improved size of the one tried, that if others, say some of the most beautiful kinds, were worked upon stocks of the C. reticulata, the size would be greatly improved.

It has annually been a practice with me to thin the flower buds, where there were more than one in a place, by only retaining one—the bud was certain to remain, and the blossoms to be finer; but when more are retained, that is twin flowers, or even more in a place, they are very liable prematurely to fall off. I thin away the buds when they are about as large as a marrow pea. My Marchioness of Exeter Camellia, worked as above described, is now finely budded, and when in bloom I will forward to the Conductor of this magazine a bloom.

I grew my Camellias in chopped turfy loam, at least six months previously collected; this is well incorporated with turfy sandy peat, old rotten cow manure, and a sprinkling of bits of charcoal. I have a free drainage of broken pot and pieces of turf. I never have soil sifted. By this, and a regular attention to watering, my plants are very vigorous, and in robust health.

## ARTICLE VI.

### ON THE WANT OF LACING IN PINKS DURING THE PAST SEASON.

BY DIANTHUS.

WHEN up in London this season, I attended all the first-rate flower exhibitions, and being an admirer and grower of the best kinds of Pinks, I paid attention to my pet flowers exhibited, I was much surprised to notice that in general there was much deficiency in the lacing of the petals. This I supposed was induced by the dryness of the season, and a deficiency of watering. My Pinks never did better; I grow them in a sandy loam, well enriched. I had the beds well watered to six inches deep once a week, and after sunset, before the flowers expanded, I had the plants sprinkled over, by means of a watering-can having a rose, with soft water. This attention was amply repaid by a most beautiful and perfect bloom.

## ARTICLE VII.

### THE HISTORY OF GARDENING.

BY CLERICUS.

GARDENING was probably one of the first arts that succeeded to that of building houses, and naturally attended property and individual possession. Culinary, and afterwards medicinal herbs were the objects of every head of a family: it became convenient to have them within reach, without seeking them at random in woods, in meadows, and on mountains, as often as they were wanted. When the earth ceased to furnish spontaneously all these primitive luxuries, and culture became requisite, separate inclosures for rearing herbs grew expedient. Fruits were in the same predicament, and those most in use or that demanded attention, must have entered into and extended the domestic inclosure. The good man Noah, we are told, planted a vineyard, drank of the wine, and was drunken, and every body knows the consequences. Thus we acquired kitchen gardens, orchards, and vineyards. I am apprised that the prototype of all these sorts was the garden of Eden; but as that Paradise was a good deal larger than any we read of afterwards, being inclosed by the rivers Pison, Gihon, Hiddekel, and Euphrates, as every tree that was pleasant to the sight and good for food grew in it, and as two other trees were likewise found there, of which not a slip or sucker remains, it does not belong to the present discussion. After the Fall, no man living was suffered to enter into the garden; and the poverty and necessities of our first ancestors hardly allowed them time to make improvements in their estates in imitation of it, supposing any plan had been preserved. A cottage and a slip of ground for a cabbage and gooseberry bush, such as we see by the side of a common, were in all probability the earliest seats and gardens: a well and bucket succeeded to the Pison and Euphrates. As settlements increased, the orchard and the vineyard followed; and the earliest princes of tribes possessed just the necessaries of a modern farmer.

Matters, we may well believe, remained long in this situation; and though the generality of mankind form their ideas from the import of words in their own age, we have no reason to think that for many centuries the term Garden implied more than a kitchen-garden or orchard. When a Frenchman reads of the garden of Eden, I do not doubt but he concludes it was something approaching to that of Versailles, with clipt edges, beraus, and trellis-work. If his devotion humbles him so far as to allow that, considering who designed it, there might be a labyrinth full of Æsop's Fables, yet he does not conceive, that four of the largest rivers in the world were half so magnificent as an hundred fountains full of statues by Girardon. It is thus that the word Garden has at all times passed for whatever was understood by that term in different countries. But that it meant no more than a kitchen garden or orchard for several centuries, is evident from those few descriptions that are preserved of the most famous gardens of antiquity.

That of Alcinous, in the Odyssey, is the most renowned in the heroic times. Is there an admirer of Homer, who can read his description without rapture; or who does not form to his imagination a scene of delights more picturesque than the landscapes of Titian or Juan Fernandez? Yet what was that boasted Paradise with which

The Gods ordain'd
To grace Alcinous and his happy land?—Pope.

Why, divested of harmonious Greek and bewitching poetry, it was a small orchard and vineyard, with some beds of herbs, and two fountains, that watered them, inclosed within a quickset hedge. The whole compass of this pompous garden inclosed—four acres.

Four acres was th' allotted space of ground,
Fenc'd with a green inclosure all around.

The trees were apples, figs, pomegranates, pears, olives, and vines.

Tall thriving trees confess'd the fruitful mould;
The redd'ning apple ripens into gold.
Here the blue fig with luscious juice o'erflows,
With deeper red the full pomegranate glows.
The branch here bends beneath the weighty pear,
And verdant olives flourish round the year.

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Beds of all various herbs, for ever green,
In beauteous order terminate the scene.

Alcinous's garden was planted by the poet, enriched by him with the fairy gift of eternal summer, and, no doubt, an effort of imagination, surpassing anything he had ever seen. As he has bestowed on the same happy prince a palace with brazen walls and columns of silver, he certainly intended that the garden should be proportionably magnificent. We are sure, therefore, that as late as Homer's age, an inclosure of four acres, comprehending orchard, vineyard, and kitchen garden, was a stretch of luxury the world at that time had never beheld.

The hanging gardens of Babylon were a still greater prodigy. We are not acquainted with their disposition or contents; but, as they are supposed to have been formed on terraces and the walls of the palace, whither soil was conveyed on purpose, we are very certain of what they were not; I mean they must have been trifling, of no extent, and a wanton instance of expense and labour. In other words, they were what sumptuous gardens have been in all ages till the present, unnatural, enriched by art, possibly with fountains, statues, balustrades, and summer-houses, and were anything but verdant and rural.

From the days of Homer to those of Pliny, we have no traces to lead us to guess to what were the gardens of the intervening ages. When Roman authors, whose climate instilled a wish for cool retreats, speak of their enjoyments in that kind, they sigh for grottos, caves, and the refreshing hollows of mountains, near irriguous and shady founts; or boast of their porticos, walks of planes, canals, baths, and breezes from the sea. Their gardens are never mentioned as affording shade and shelter from the rage of the dog-star. Pliny has left us descriptions of two of his villas. As he used his Laurentine villa for his winter retreat, it is not surprising that the garden makes no considerable part of the account. All he says of it is, that the *gestatio* or place of exercise, which surrounded the garden (the latter consequently not being very large), was bounded by a hedge of box, and where that was perished, with rosemary; that there was a walk of vines, and that most of the trees were fig and mulberry, the soil not being proper for any other sorts.

On his Tuscan villa he is more diffuse; the garden makes a considerable part of the description :—and what was the principal beauty of that pleasure ground? Exactly what was the admiration of this country about eighty years ago; box-trees cut into monsters, animals, letters, and the names of the master and the artificer. In an age when architecture displayed all its grandeur, all its purity, and all its taste; when arose Vespasian's amphitheatre, the Temple of Peace, Trajan's forum, Domitian's baths, and Adrian's villa, the ruins and vestiges of which still excite our astonishment and curiosity; a Roman consul, a polished emperor's friend, and a man of elegant literature and taste, delighted in what the mob now scarce admire in a cottage garden. All the ingredients of Pliny's corresponded exactly with those laid out by London and Wise on Dutch principles. He talks of slopes, terraces, a wilderness, shrubs methodically trimmed, a marble bason,* pipes spouting water, a cascade falling into the bason, bay trees, alternately planted with planes, and a straight walk, from whence issued others parted off by hedges of box, and apple trees, with obelisks placed between every two. There wants nothing but the embroidery of a parterre, to make a garden in the reign of Trajan serve for a description of one in that of King William.* In one passage above, Pliny seems to have conceived that natural irregularity might be a beauty; *in opere urbanissimo*, says he, *subita velut illati ruris imitatio.* Something like a rural view was contrived amidst so much polished composition. But the idea soon vanished, lineal walks immediately enveloped the slight scene, and names and inscriptions in box again succeeded to compensate for the daring introduction of nature.

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* The English gardens described by Hentzner in the reign of Elizabeth, are exact copies of those of Pliny. In that at Whitehall was a sun-dial and jet d'eau, which, on turning a cock, spurted out water and sprinkled the spectators. In

In the paintings found at Herculaneum are a few traces of gardens, as may be seen in the second volume of the prints. They are small square inclosures, formed by trellis-work, and espaliers,† and regularly ornamented with vases, fountains, and caryatides, elegantly symmetrical, and proper for the narrow spaces allotted to the garden of a house in a capital city. From such I would not banish those playful waters that refresh a sultry mansion in town, nor the neat trellis which preserves its wooden verdure better than natural greens exposed to dust. Those treillages, in the gardens at Paris, particularly on the Boulevard, have a gay and delightful effect. They form light corridores, and transpicuous arbours, through which the sun-beams play and chequer the shade, set off the statues, vases, and flowers, that correspond with their gaudy hotels, and suit the gallant and idle

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Lord Burleigh's, at Theobalds, were obelisks, pyramids, and circular porticos, with cisterns of lead for bathing. At Hampton Court the garden walls were covered with rosemary, a custom, he says, very common in England. At Theobalds was a labyrinth also, an ingenuity I shall mention presently to have been frequent in that age.

* Dr. Plot, in his Natural History of Oxfordshire, p. 380, seems to have been a great admirer of trees carved into the most heterogeneous forms, which he calls *topiary works*, and quotes one Laurembergius for saying that the English are as expert as most nations in that kind of sculpture, for which Hampton Court was particularly remarkable. The doctor then names other gardens that flourished with animals and castles, formed *arte topiaria*, and above all a wren's nest, that was capacious enough to receive a man to sit on a seat made within it for that purpose.

† At Warwick Castle is an ancient suit of arras, in which there is a garden exactly resembling these pictures of Herculaneum.

society who paint the walks between their parterres, and realize the fantastic scenes of Watteau and Durse.

From what I have said, it appears how naturally and insensibly the idea of a kitchen garden slid into that which has for so many ages been peculiarly termed a Garden, and by our ancestors in this country, distinguished by the name of a Pleasure Garden. A square piece of ground was originally parted off in early ages for the use of the family:—to exclude cattle, &c., it was separated from the fields by a hedge. As pride and a desire of privacy increased, the inclosure was dignified by walls; and, in climes where fruits were not lavished by the ripening glow of nature and soil, fruit-trees were assisted and sheltered from surrounding winds by the like expedient; for the inundation of luxuries which have swelled into general necessities, have almost all taken their source from the simple fountain of reason.

When the custom of making square gardens inclosed with walls was thus established, to the exclusion of nature and prospect,* pomp and solitude combined to call for something that might enrich and enliven the insipid and unanimated partition. Fountains, first invented for use, which grandeur loves to disguise and throw out of the question, received embellishments from costly marbles, and at last, to contradict utility, tossed their waste of waters into air in spouting columns. Art, in the hands of rude man, had at first been made a succedaneum to nature; in the hands of ostentatious wealth, it became the means of opposing nature; and the more it traversed the march of the latter, the more nobility thought its power was demonstrated. Canals measured by the line were introduced in lieu of meandering streams, and terraces were hoisted aloft in opposition to the facile slopes that imperceptibly unite the valley to the hill. Balustrades defended these precipitate and dangerous elevations, and flights of steps rejoined them to the subjacent flat from which the terrace had been dug. Vases and sculpture were added to these unnecessary balconies, and statues furnished the lifeless spot with mimic representations of the excluded sons of men. Thus difficulty and expense were the constituent parts of those sumptuous and selfish solitudes; and every improvement that was made, was but a step farther from nature. The tricks of water-works to wet the unwary, not to refresh the panting spectator, and parterres embroidered in patterns like a petticoat, were but the childish endeavours of fashion and novelty to reconcile greatness to what it had surfeited on. To crown these impotent displays of false taste, the shears were applied to the lovely wildness of form with which Nature has distinguished each various species of tree and shrub. The venerable Oak, the romantic Beech, the useful Elm, even the aspiring circuit of the Lime, the regular round of the Chestnut, and the almost moulded Orange Tree, were corrected by such fantastic admirers of symmetry. The compass and square were of more use in plantations than the nurseryman. The measured walk, the quincunx, and the etoile, imposed their unsatisfying sameness on every royal and noble garden. Trees were headed, and their sides pared away; many French groves seem green chests set upon poles. Seats of marble, arbours, and summer-houses, terminated every visto; and symmetry, even where the space was too large to permit its being remarked at one view, was so essential, that, as Pope observed,

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* It was not uncommon, after the circumjacent country had been shut out, to endeavour to recover it by raising large mounds of earth to peep over the walls of the garden.

> Each alley has a brother,
> And half the garden just reflects the other.

Knots of flowers were more defensibly subjected to the same regularity. Leisure, as Milton expressed it,

> In trim gardens took his pleasure.

In the garden of Marshal de Biron, at Paris, consisting of fourteen acres, every walk was buttoned on each side by lines of flower-pots, which succeeded in their seasons: there were nine thousand pots of Asters, or la Reine Marguerite.

We do not precisely know what our ancestors meant by a bower; it was probably an arbour; sometimes it meant the whole frittered inclosure, and in one instance it certainly included a labyrinth. Rosamond's bower was indisputably of that kind, though whether composed of walls or hedges we cannot determine.* A square and a round labyrinth were such capital ingredients of a garden formerly, that in Du Cerceau's architecture, who lived in the time of Charles IX. and Henry III., there is scarce a ground-plot without one of each. The enchantment of antique appellations has consecrated a pleasing idea of a royal residence, of which we now regret the extinction. Havering-in-the-Bower, the jointure of many dowager queens, conveys to us the notion of a romantic scene.

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* Drayton, in a note to his Epistle of Rosamond, says, her labyrinth was built of vaults under ground, arched and walled with brick and stone; but, as Mr. Gough observes, he gives no authority for that assertion. V. pref. to 2d edit. of British Topography, p. xxx. Such vaults might remain to Drayton's time, but did not prove that there had been no superstructure.

In Kip's Views of the Seats of our Nobility and Gentry, we see the same tiresome and returning uniformity. Every house is approached by two or three gardens, consisting perhaps of a gravel-walk and two grass-plats, or borders of flowers. Each rises above the other by two or three steps, and as many walls and terraces and so many iron gates, that we recollect those ancient romances, in which every entrance was guarded by nymphs or dragons.

Yet though these and such preposterous inconsistencies prevailed from age to age, good sense in this country had perceived the want of something at once more grand and more natural. These reflections, and the bounds set to the waste made by royal spoilers, gave origin to Parks. They were contracted forests, and extended gardens. Hentzuer says, that, according to Rous of Warwick, the first park was that at Woodstock. If so, it might be the foundation of a legend that Henry II. secured his mistress in a labyrinth: it was no doubt more difficult to find her in a park than in a palace, where the intricacy of the woods and various lodges buried in covert might conceal her actual habitation.

It is more extraordinary that having so long ago stumbled on the principle of modern gardening, we should have persisted in retaining its reverse, symmetrical and unnatural gardens. That parks were rare in other countries, Hentzner, who travelled over great part of Europe, leads us to suppose, by observing that they were common in England. In France they retain the name, but nothing is more different both in compass and disposition. Their parks are usually square or oblong inclosures, regularly planted with walks of chestnuts or limes, and generally every large town has one for its public recreation.

*(To be continued.)*

# PART II.

## LIST OF NEW AND RARE PLANTS.

**Backhousia myrtifolia. Myrtle-leaved.** (Bot. Mag.) Myrtaceæ. Icosandria Monogynia. James Backhouse, Esq., of the York Nursery, discovered this pretty greenhouse shrub in the Illawara district, in New South Wales. Mr. Backhouse says it is a small tree, sixteen feet high, with slender branches. The flowers are produced in corymbs. It is very like a broad-leaved Myrtle, with hairy edges to the leaves.

**Barbacenia squamata. Scaly-stalked.** (Bot. Mag.) Hæmodoracea. Hexandria Monogynia. Sent from the Organ Mountains of Brazil to Messrs. Veitch's, of Exeter. It has bloomed in the collection at Kew. It has much the appearance of a small Yucca, with finely spined margins to the leaves. The perianth, or flower, is a small star-like form, of a bright orange-red colour. It is a little neat stove plant.

**Epidendrum dipus. Two-footed.** (Bot. Reg. 4.) Orchidaceæ. Gynandria Monandria. From Brazil to Messrs. Loddiges's, with whom it has bloomed. It much resembles E. nutans. The flowers are produced in a compact panicle, each bloom about three-quarters of an inch across. Sepals and petals green, tinged with brown; lip white, tinged with yellow.

**Eria vestita. Furred Eria.** (Bot. Reg. 2.) Orchidaceæ. Gynandria Monandria. A native of Sincapore, and of Manilla too. It has much the appearance of a Dendrobium. The edges of the leaves and the stems are singularly covered with reddish-brown hairs. The flowers are produced in a pendulous raceme, white inside, and a reddish-brown outside.

**Gloxinia tubiflora. Tube-flowered.** (Bot. Reg. 3.) Gesneriaceæ. Didynamia Angiospermia. Mr. Tweedie sent this charming greenhouse plant from Buenos Ayres. The flowers are of pure white, excepting the tinge of dark outside the tube. The tube is near four inches long. The spreading limbs of the corolla are about an inch and a-half across. The flowers are produced in profusion, are fragrant, and make a beautiful appearance. It well deserves a place in the warm greenhouse or plant-stove. It flourishes in either, and blooms for a long period.

**Lilium Thomsonianum. Dr. Thomson's Lily.** (Bot. Reg. 1.) Liliaceæ. Hexandria Monogynia. A native of Mussooree, a province of British India. It has bloomed in the greenhouse of Messrs. Loddiges. It is a half-hardy plant, requiring a similar treatment to the Tigridias. The flowers are produced in fine erect racemes, of a pretty rose colour, fragrant. The blossoms are campanulate, about two inches long, and, when fully open, about the same across the mouth. It is a very beautiful species.

**Luculia Pinciana. Mr. Pince's.** (Bot. Mag.) Rubiaceæ. Pentandria Monogynia. Mr. Pince, nurseryman, of Exeter, received seeds of this splendid plant from Nepal, and has cultivated it in the greenhouse. It is a shrub attaining the height of several feet. The flowers are produced in large cymes, which, spreading on terminal leafy branches, thus several uniting, form one compound cyme, a foot or more in diameter. They are white on the upper side, changing by age to a cream or ivory colour, tinged with blush. The outside of the flower is a deep blush, and the tubular portion red. The magnificent heads of its lovely, delicious fragrant flowers renders it one of the finest plants introduced for many years. It deserves to be grown wherever it is practicable.

**Nymphæa rubra. Red-flowered Water Lily.** (Pax. Mag. Bot.) Nympheaceæ. Polyandria Monogynia. A native of Hindostan, where it grows in pools of fresh water. It is a stove aquatic in this country. The flowers are of a beautiful purple crimson, very showy, nearly double, each blossom being about five inches in diameter. The tank system of heating would suit it the best. A quantity of loamy earth should be spread in the bottom of a tub, or tank, for the roots to fix in; and in the winter the water should be drained off to its surface. But the earth must be constantly kept in a somewhat moist state, and not to become quite dry. It bloomed recently in Mr. Knight's collection, at his nursery in the King's-road, Chelsea.

**Sida graveolens. Heavy-scented.** (Bot. Mag.) Malvaceæ. Monadelphia Polyandria. A native both of the East and West Indies. It is a handsome species, with soft, pale-green foliage, and yellow flowers, having a deep blood-coloured eye. It is a moderate sized shrubby plant, with large Hibiscus-like flowers. It would be a fit companion to the Abutilon striatum.

**Syringa Emodi. Himalayan Lilac.** (Bot. Reg. 6.) Oleaceæ. Diandria Monogynia. A fine dwarf hardy shrub, from three to five feet high; blooms in this country from May to July. The flowers have much the appearance of those of the Privet, but the heads are double their size.

**Turnera ulmifolia. Elm-leaved.** (Bot. Mag.) Turneraceæ. Pentandria Trigynia. Seeds were sent from Jamaica. It is a strong-growing plant, with herbaceous stems, said to survive two or three years. The flowers are yellow, showy, about the size of the Allamanda Cathartica.

**Pleroma petiolata. Long-petioled.** (Pax. Mag. Bot.) Melastomaceæ. Decandria Monogynia. A beautiful flower Melastoma-like plant, from South America. It has bloomed at the Clapton Nursery. The plant grows a yard high. The flowers are numerously produced, in terminal panicled heads, of a beautiful rich purple and blue. Each blossom is two inches across. It is a fine hothouse plant.

### New Plants noticed.

**Aphellandra aurantiaca.**—This is a very valuable addition to the hothouse winter-blooming plants. It is a noble looking plant, producing fine terminal spikes of rich dazzling orange-red flowers. It has been in bloom for a length of time at Messrs. Hendersons, of Pine-apple Nursery, London.

**Corræas.**—A number of varied and beautiful hybrids are in bloom at Mr. Gaines's, of Surrey-lane, Battersea. They are very interesting plants for ornamenting the greenhouse during winter.

# PART III.

## MISCELLANEOUS INTELLIGENCE.

### QUERIES.

**A Descriptive List of Dahlias.**—I should be obliged by a descriptive list of the best Dahlias.
An Amateur Grower.

[The advertised lists of the nurserymen, &c., will soon be given, and they will contain the information required, and will render any list in the body of our work unnecessary.—Conductor.]

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**On Ants in the Flower-garden.**—I should be greatly obliged if some reader of the Cabinet would inform me how to destroy ants from the flower borders, which in mine greatly injure the flowers.

Bath. A Subscriber.

**On Gesneria Zebrina.**—I have under my charge some fine plants of Gesneria Zebrina, three feet high. I am much mortified to see all their blossom buds drop off before they expand, although they grow admirably, with beautiful dark-green foliage. They have suitable soil, plenty of pot room, and good drainage, &c., with a temperature of from 70 to 80 degrees, in a moist stove. They bloom a little at first, but soon get in the way I mention. Can you, or any of your numerous friends, inform me the reason of their doing so, or the best mode of treatment? By so doing, through the medium of your next number of the CABINET, you will much oblige A GARDENER.

Cheshire, October 10.

P.S. I have a fine plant of Goldfussia glomerata, but it does not show any signs of flowering. Is it worth room, or likely to flower soon? I have had it two years.

[The G. glomerata is a very pretty flowering plant; the flowers are purple; it is a Ruellia-like plant. Let the plant have a season of rest in a cooler temperature, till the middle of March, and at the same time only water to keep the soil barely moist. Repot at the time named, and put in the usual stove temperature, giving it other due attention, and it usually blooms freely. The Gesneria ought not to lack water at the roots, nor be near to the dry scorching heat of the flue; perhaps the temperature where it is kept is too high. We have seen fine plants in profuse bloom in a warm greenhouse. Try different situations, along with regular due attention. The ends of shoots, having flower heads formed, cut off close under a joint, and inserted singly into small-sized pots, and placed in moist heat, soon take root; and afterwards repotted, if required, into a size larger, form beautiful flowering dwarf specimens. It is a fine plant for winter ornament; may be had in bloom the entire thereof.—CONDUCTOR.]

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ON RHODANTHE MANGLESII.—A Subscriber will be very glad to know, from any one who has grown Rhodanthe Manglesii successfully, the mode of culture, and the soil in which it should be grown to flourish.

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ON SWEET-SCENTED PELARGONIUMS.—I am desirous of procuring some of the fragrant-leaved Pelargoniums, and shall be obliged by the names of a few sorts of that class. JUVENIS.

[Oak-leaved, Fair Ellen, Rose Scented, Balm Scented, Prince of Orange, Emily, Citron Scented, and Bagshot Park.]

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ON GUANO.—In a late number of the "Gardener's Chronicle" it is recommended to apply 3 cwt. to one acre. Reducing that to the size of my vine border, or conservatory border, *i. e.*, the border into which the roots of my vines, &c., run, and in which they are planted, it will take two pounds of Guano, which I would powder and sift, and with an equal quantity (or three times as much) of sifted loam, I would sow over the border, taking care to do so very equally. I will feel very much obliged if some correspondent will, as early as may be (viz., in your next number), inform me at what period I should apply this Guano. Secondly, how often to be repeated. Thirdly, how often should I apply liquid manure to plants in pots or to a flower-border? Plants in pots, in a greenhouse, will require water frequently. Are they to be always watered with liquid manure (Guano in water), or how often? Flower-borders may require no watering if there be rain; but, notwithstanding, how often will it do them good to have a little Guano-water? Fourthly, which is the best, Potter's or Peruvian Guano? BURRIENSIS.

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ON MANURE, &c., FOR FLOWER BORDERS.—I will thank you to inform me in your next valuable miscellany, what you consider as the best dressing for the common flower borders. Whether salt can be applied with advantage, if so, the quantity to use most proper, or whatever you may consider as the best ingredient at the period of forking over the borders. Q.

January 8th.

⁂ My garden is a light dry soil with a gravelly bottom.

[A free addition of fresh loam with a moderate mixture of well rotted leaf mould or well rotted hot-bed dung, if of cow-dung, is the best application that can be given. We have found the plants to grow freely and bloom much more profusely, than when a greater quantity of rotten dung was given and no fresh loam. When an addition of this dressing would raise a bed or border too high to retain the old soil, we had some of the latter removed in due proportion. We never tried salt, and we think it would not answer. Guano is spoken of as being beneficial.—CONDUCTOR.]

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A LIST OF PENTSTEMONS.—A Constant Reader would be particularly obliged to see in the February Number, a descriptive list of Pentstemons, especially such as do not partake too much of the Foxglove character. A list was given in the December Number for 1843, but no doubt there has been valuable additions since that time. Will the kinds come true from seed?

[If the seed be collected from a plant that has been grown remote from any other kind, and thus be preserved from cross impregnation, it certainly will come true to kind. If new varieties are desired, by impregnation with bees, or otherwise effected, they are easily obtained.

P. acuminatis, purple.
albidus, white.
angustifolium, lilac.
argutum, blue.
atropurpureum, purple.
attenuatum, cream.
Barclayanus, lilac.
breviflorum, white and pink.
campanulatum, lilac purple.
——— violaceum.
rubrum.
Cobœa, pale purple and white
connatum, rose.
confertum, pale yellow.
crassifolium, blue.
diffusum, purple.
deustum, cream.
digitalis, white.
——— roseum, rose.
erianthemum, purple.
glabrum, dark purple.
glaberrimum, blue.
glandulosum, pale blue.
glaucum, pale lilac.
gracilis, blue.
gentianoides, dark purple.
——— coccineum, scarlet.
——— Morrisoni, rosy red.
roseum, rose.

P. gentianoides heterophyllum, r
grandiflorum, rosy purple.
Harrisonii, bright scarlet.
hirsutum, pale purple.
Knightii, purple.
lanceolatum, lilac rose.
lævigatum, lilac.
Millerii, red.
Murrayanum, scarlet.
Mackayanum, purple yellow.
nitidum, lilac and white.
ovatum, blue
procerum, purple.
pruinosum, blue.
pubescens, pale purple.
pulchellum, lilac.
primulinum, blue and lilac.
punctatum, purple red.
perfoliatum, rosy purple.
Richardsonii, dark purple.
roseum, rose.
elegans, rosy red.
Scoulerii, light purple.
speciosum, blue.
splendens, lilac.
staticifolium, dark lilac.
triphyllum, pale red.
venustum, purple.
violaceum, violet blue.

The above are the best kinds we know, they partake in some degree of a similar form, and deserve a place in every flower garden, blooming for a long period, and being both interesting and showy. An additional recommendation is that they may be procured cheap. They are readily increased by slips of the young side shoots or by seeds.—CONDUCTOR.]

## REMARKS.

ROSES INCREASED BY CUTTINGS.—Short shoots, cut off clean, and close to the parent stem, inserted in sand, and placed in a hot-bed frame, kept close and moist, pressing the sand close to the stem at the time of setting, will speedily strike root. I put off this year's shoots on the 1st of June, and now, out of 150 put off, I have 136 rooted plants. I shaded them from hot sun, and had the tops sprinkled over night, morning, and mid-day for the first ten days, applying finely over by means of the syringe. This tended to keep the foliage fresh, and materially assisted in rooting. I put in Bourbon, China, Moss, Damask, French, and Provence kinds. ROSA.

REMARKS ON THE CULTURE OF TROPICAL ORCHIDEOUS PLANTS.—Extract from ublication on the Tribe, with figures, &c., by James Bateman,

And now as respects the leading points in cultivation. Supposing the plants established in a suitable house—which is an indispensable p following rules will be found to contain all that is most essential for their successful management.

1st. The plants can scarcely have too much light or too little sun.

Light prevents mildew, strengthens the fibre, and checks the disposition to throw up a succession of weakly shoots, which are quite incompatible with the production of flowers. The sun, on the contrary, scorches and turns the leaves yellow, especially when it first begins to shine powerfully upon plants that have just left their winter quarters. In order to secure as much light as possible, many species should be suspended in the air from rafters or chains, some being placed on blocks of wood (Cork wood is the best), or fragments of Cocoa-nut husks, and others in baskets of wire or wicker-work filled with moss and broken peat, or in pots with pierced sides. The latter answer perfectly for plants (*e. g.*, the Saccolabiums), which are of slow growth, and thrust their roots into the air. Baskets answer best for Stanhopeas and the like. To prevent injury from the rays of the sun, shading is of course necessary, but this should be so arranged as to be easily removed, as it ought not to be continued for more than ten or twelve hours on the very longest summer's day. Exotic climbing plants introduced sparingly are advantageous, and have a good effect.

2nd. Take care of the roots.

On the health of the roots everything depends. The winter is with them the most critical season, for if suffered to grow too dry they shrivel up and perish: if too wet they rot. Much, of course, depends upon the mode in which the plants are potted, and which should be such as to admit of their readily parting with all superfluous moisture; and to secure this nothing is better than a plentiful admixture of broken potsherds. High-potting is now so generally practised in good collections, that it is needless to insist upon its importance. Rapidly-growing plants, such as the different species of Phalus, Gongora, Peristeria, Stanhopea, &c., require to be broken up and entirely repotted every second or third year; on the other hand, there are some Air-plants, &c., that may remain undisturbed for five or ten years together.

3rd. Beware of noxious insects.

Orchidaceæ are more particularly exposed to the attacks of the following insects:—woodlice, crickets, and cockroaches, the thrip, a minute woolly white scale, and a diminutive species of snail; the two last being infinitely the most pernicious. Woodlice are easily kept in check by placing the plants on saucers, or within troughs filled with water, especially if the valuable aid of a few toads be called in. The "Oniscamyntic Epiphyte-stand," invented by Mr. Lyons, is an ingenious and, no doubt, effectual way of accomplishing the same end. It is made by merely fixing a forked branch, or block of wood, to the raised centre of a massive saucer or feeder, which, being kept constantly full of water, forms a sort of fosse—impassable to vermin—round the plant it is intended to guard. Crickets and cockroaches are very fond of flower-scapes, and to be dreaded accordingly. Red wafers scattered over and among the pots are to them very tempting baits, and, if swallowed, the red lead they contain acts as a poison, but these pests are best destroyed by the mixture recommended for the white scale. The thrip does not do much mischief, except where plants are either neglected, or grown in too hot and dry a temperature. It usually first appears among the Cataseta, and is to be removed by careful washing. Small snails abound in some collections, while in others they are unknown; it is difficult to conjecture whence they come, and all but impossible to eradicate them entirely. They batten upon the tenderest roots, such as plants put forth when they are just beginning to grow, and if not kept in check would speedily produce irretrievable mischief. Lettuce-leaves, slices of potatoe, turnip, &c., are very enticing; and while they divert the attention of the enemy from the roots, they also afford an opportunity of capturing him. The collections which are watered exclusively with rain-water are the least infested. But the worst plague of all is the small white scale, which, in its first insidious approaches, appears only as a white speck upon the leaves, then covers them with a soft whitish down, and finally kills them. For this the following remedy will be found efficacious; viz., dissolve half a pound of camphor in a pint of spirits of wine; the result will be an impalpable powder, to which add one pound of Scotch snuff; one ditto pepper; one ditto, sulphur, and keep in a bottle (carefully stopped). This mixture should be dusted over the infected parts, and repeated whenever or wherever the enemy shows itself. If persisted in for some time, the mixture rarely fails to effect a perfect cure; and it has the further good property of acting as a most deadly poison to cockroaches, &c., which have quite disappeared in the collection at Knypersley since this mixture came into frequent use. Besides the above annoyances, the red spider and the brown scale are frequently injurious, but never except in cases of gross neglect.

4th. Give the plants a season of rest.

Without a season of rest, most plants will not flower at all, and others do so very imperfectly. It is easily accomplished in a variety of ways, either by moving the plants from the warmer to the cooler end of the house; or by diminishing the quantity of water; or by placing them in a cooler house. Even exposure in a hot, dry atmosphere, although it scorches their leaves, not unfrequently throws them into vigorous flower. Plants from the East Indies and from other climates, where the extremes of drought and wet are not felt so severely as in Brazil or Hindostan, require a season of rest proportionably short, and of a less decided character.

5th. Attend to the condition of the air.

In winter 60° to 65° is a wholesome temperature fo rmost of the species; in the summer it may rise to 70° or 75°, or even higher if derived from the heat of the sun. Where there are two houses, the warmer one should not be lower than 70° even in winter; but, fortunately, there are comparatively few kinds that insist upon so hot a berth. The air should always be soft, and nearly saturated with moisture. The latter should, however, be prevented from dripping upon the plants, as it condenses; and this is easily effected by fixing a small copper-pipe, or piece of channelled wood, under each rafter and sash-bar, to catch and carry off the water.

6th. Do not over-water.

This a beginner is very apt to do, and a grievous fault it is. When plants do not shrivel or flag, it is a sign that they are content with the humidity that the atmosphere of the house supplies. When watering is necessary, it should not be done indiscriminately, but according to the wants of particular plants. It is also of great importance to use rain-water only, which may be collected for the purpose in a tank, and which should not be applied of a temperature below 60°. Syringing in moderation may be had recourse to in hot weather. Some of the Sobralias, together with Bromheadia palustris, grow more vigorously if their pots are set in saucers of water during the summer months.

To the foregoing rules the following advice may be added:—" Do not aim at having too large a collection, but rather strive to grow a few good kinds in the best style." With moderate care and in a moderate-sized house, the whole of the plants enumerated in the subjoined " Century," will thrive apace, and bloom freely—and he whom such a brilliant assemblage fails to satisfy must be an ardent collector indeed.

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ACHIMENES.—During the last summer I had a number of Achimenes longifolia, grandiflora, hirsuta, and coccinea plants, grown in baskets similar to Orchideous plants, [and suspended in my greenhouse, and some in my sitting-room. They bloomed very profusely, and hanging gracefully on every side, they had a very interesting and pleasing appearance. CLERICUS.

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ON CHARCOAL.—I have tried the effect of charcoal, mixed with some compost, in which I potted some Pelargoniums, and its good effect is very striking. Its open, porous nature renders it peculiarly useful when mixed with rich manures, abounding in ammonia, as it prevents the loss of that volatile substance. By the gradual action of the air it yields certain gaseous matters requisite to plants; and moreover contains all those substances which render wood-ashes valuable as manure. In general, charcoal is too dear to be used as a manure; but where it can be obtained at a cheap cost, there is little doubt it may be applied with great advantage, and especially in connexion with ammoniacal or strong animal manures. CLERICUS.

On Succulents.—To grow Succulents successfully in a greenhouse, they should be kept in the lightest possible situation, in order to have the foliage of a dark colour, and without which they never flower well. The soil that I find suits the best is equal parts of rich loam, leaf mould, and peat, and to have a very free drainage. Amongst the compost a few pieces of potsherds or broken stones and bits of charcoal should be scattered. The entire class so attended to will vigorously flourish. Senex.

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To prevent Birds taking newly-sown Seeds, &c.—To gentlemen and market gardeners, who have been troubled with birds destroying early crops of vegetable or flower seeds, I beg to observe, that I prevent their depredations as follows:—I take a tablespoonful of rectified naphtha, and mix it with two gallons of water, and water my ground as soon as I sow my seeds. I water it again when the plants first appear out of ground, such as sweet peas, radish, cabbages, and early crops of peas, and whatever the birds attack so much. Another way I find is a good plan; that is, to take a ball of worsted, and steep it in the naphtha, and strain the same over the rows of seeds; this being done, they never come to attack the seeds. I find this an excellent thing for keeping the fly from eating my young plants, such as turnips, and all kinds of vegetable or flower seeds, by giving the plants a little water when they begin to come into rough leaf, whether the seeds were not even steeped as above stated. This may be done without the least danger of injuring the plants. J. R.

Grove House.

### New Varieties of Indian Azaleas.

A. exquisite, deep pine, with a lighter margin, and spotted carmine; a fine flower.

A. carminata, flowers a rich deep carmine.

A. Emmelina, light red, the flowers large.

A. erecta, fine crimson red, brilliant.

A. exquisita, deep pink, light margin, spotted with scarlet.

A. formosa, rich bright red, with large flowers.

A. gloriosa, fine purple, with carmine spots.

A. laterita-pulchra, pale bright red, fine form.

A. King of Saxony, bright vermilion, fine form, and large size.

A. optima, orange red, with darker spots, fine shape.

A. prœstantissima, light vermilion red, with dark spots.

A. refulgens, deep rich scarlet, very pretty.

A. splendida, rich purple, with deeper spots.

The above may be obtained of Mr. Smith, of Norbiton, near Kingston, or of the Trade in and around London.

(*To be continued.*)

## FLORICULTURAL CALENDAR FOR FEBRUARY.

Greenhouse.—This department should have good attendance during this month.

The herbaceous kinds of plants will require occasional waterings, but less frequent and in less quantities than the woody kinds. Succulents, as Aloes, Sedums, &c., should be watered very sparingly, and only when the soil is very dry. When water is given it should be as much as will moisten ALL the soil, where water is only given to moisten the soil an inch or two at the top and the other kept quite dry, the result is generally certain, namely, the death of the plant. The plan to be attended to is, water only when necessary, but a full supply when it is done. Air should be admitted at all times when the weather is favourable, or the plants cannot be kept in a healthy state. When the weather is *damp*, foggy, &c., do not give air then, let a *dry* air only be admitted. If any of the Oranges, Lemons, &c., have naked or irregular heads, towards the end of the month, if fine mild weather occur, begin to reclaim them to some uniformity by shortening the branches and head shoots; by this attention they will break out new shoots upon the old wood, and form a regular head; be repotted in rich compost *in April,* reducing the old ball of earth carefully, and replacing with new soil. After shifting, it would be of great use to the plants if the convenience of a glass case could be had in which to make a dung-bed that the pots might be plunged in; this would cause the plants to shoot vigorously, both at the roots and tops. Repot Amaryllis, &c. Tender and small kinds of plants should *frequently* be examined, to have the *surface* of soil *loosened,* and a portion of fresh soil added to the surface, decayed leaves taken away; or if a portion of a branch be decaying, cut it off immediately, or the injury may extend to the entire plant and destroy it. Gloxinias, Achimenes, &c., now beginning to push, should be potted.

Auriculas should immediately be top-dressed, taking off old soil an inch deep, and replacing it with new rich compost; give air freely when dry weather.

Bulbs, as Hyacinths, &c., grown in water-glasses, require to be placed in an airy and light situation when coming into bloom. The water will require to be changed every three or four days. The flower-stem may be supported by splitting a stick at the bottom into four portions, so as it will fit tight round the edge of the glass at the top. Beds of Hyacinths, will require attention if severe weather occurs, also beds of Tulips must have the bulbs protected from the least touch of frost, as also the tender spike, or the bloom will be injured so as to be notched, &c. Water-proof cloth covers over hoops, &c., do best.

The seed of Calceolarias should be sown at the end of the month, and be placed in a hot-bed frame, also cuttings or slips be struck, as they take root freely now.

Cuttings of Salvias, Fuchsias, Heliotropes, Geraniums, &c., desired for planting out in borders or beds during spring and summer, should be struck in moist heat at the end of the month, in order to get the plants tolerably strong by May, the season of planting out.

DAHLIAS.—Dahlia roots, where great increase is desired, should now be potted, or partly plunged into a little old tan in the stove, or a frame, to forward them for planting out in May. As shoots push, take them off when four or five inches long, and strike them in moist heat. *Seed* should be sown either in pots or upon a hot-bet. Pots or boxes with seed placed in a warm room near light, and admitting plenty of air to the plants when up, will succeed well.

Ranunculuses and Anemones should be planted by the end of the month. See articles in former numbers.

Herbaceous Perennials, Biennials, &c., may be divided about the end of the month, and planted out where required.

Mignonette, to bloom early in boxes or pots, or to turn out in the open borders, should now be sown.

Rose Trees, Lilacs, Pinks, Hyacinths, Polyanthuses, Narcissus, Honeysuckles, Persian Lilacs, Primroses, Rhodoras, Persian Irises, Sweet Violets, Cinerarias, Hepaticas, Aconites, Jasmines, Azaleas, Lily of the Valley, Correas, Gardenias, Cyclamens, Guelder Roses, &c., should regularly be brought in for forcing.

TENDER ANNUALS.—Some of the kinds, as Cockscombs, Amaranthuses, &c., for adorning the greenhouse in summer, should be sown immediately.

Ten-week Stocks, Russian and Prussian Stocks, &c., to bloom early, should be sown immediately in pots, placed in a hot-bed frame, or be sown upon a slight hot-bed, also some other of the tender kinds, to prepare them strong for early summer blooming, and for entire beds of a sort.

Protect the stems of tender plants with Furze branches, &c. The stems of tender climbing Roses are screened by such precaution.

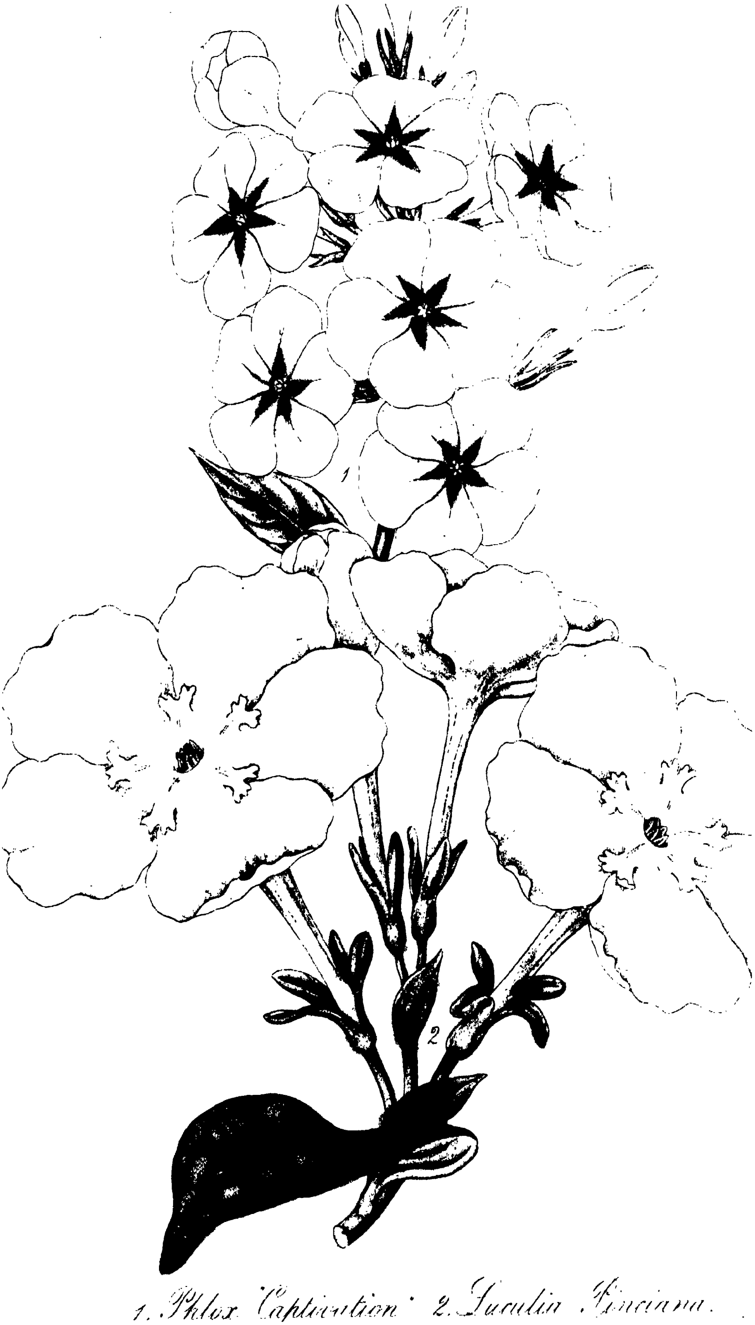
Chrysanthemums must be kept in a cool frame, free from frost, but admit air to prevent them drawing up.

Cineraria seed should now be sown.

Carnations, &c., may now be potted singly; they must be protected from severe frost, and from damps; admit dry air, &c. Pinks are liable to injury from worms, to prevent it, make the soil firm round the stems.

Pelargoniums, for showing, &c., should now have a final repot. (See articles in previous numbers.)

Lobelias, forward the old plants, and as early as consistent pot suckers singly into pots for beds, specimens, &c.



1. Phlox "Captivation" 2. Luculia Pinceana.

THE

FLORICULTURAL CABINET,

MARCH 1st, 1845.

# PART I.

## EMBELLISHMENTS.

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## ARTICLE I.

### 1. PHLOX, var. CAPTIVATION (HARRISON'S).

This very handsome variety is one, out of a vast number, that we have raised from seed, and which bloomed for the first time last year. During the two previous years, we paid particular attention to the impregnation of all the finest-formed flowers, and of the most dissimilar colours, both in early and late blooming kinds, especially to obtain the beautiful ones growing from one and a half to two feet high, and having a striking centre; and the results far exceeded our expectation. We have many thousands to bloom the coming season, and calculate on a valuable addition to this lovely tribe of hardy plants. The entire tribe are deserving a place in the flower border, and a selection of the best ought to be in every flower-garden.

All are quite hardy, increase freely, and easy to cultivate, and a succession of bloom in Phloxes may be had from April to November.

### 2. LUCULIA PINCIANA.

Beautiful as is the L. gratissima, when producing its fine clusters of fragrant and soft looking pink-coloured blossoms, yet this new species is said very far to excel it in the magnitude of its flowers, and the fine terminal heads in which they are congregated, each head being a foot or more in diameter, and these produced in profusion. The flowers at the upper side are at first white, then change to a cream colour tinged with blush, the outer surface is a deep blush, and the tube almost red. These beautiful heads of flowers make a fine contrast with the noble velvetty-green foliage. The blossoms are highly fragrant, and perfume the air around to some distance with their delicious fragrance. The plant is about the same in vigour as L. gratissima, and appears to flourish admirably in the greenhouse. It deserves to be in every one, being so fine a plant, and blooming in the autumn and winter months.

## ARTICLE II.

### FURTHER REMARKS ON LANDSCAPE GARDENING.

BY A LANDSCAPE GARDENER.

In the late numbers of the previous volume of this Magazine, I gave some hints on the formation of walks, &c. I here forward a few more on the mode of producing the most harmonious effects under existing circumstances.

All the most beautiful objects or scenes in nature are symmetrical, forming a centre and two sides, thus together composing a whole, which has a beginning, a middle, and an end.

Now, in this centre, whether visible, or supplied by the imagination, is the axis of symmetry. In the simplest kind of symmetry, the two sides are equal and alike, and the axis is, of course, easily discovered; but in cultivated and refined symmetry, the sides are unequal, and so combined and varied with the centre, that it requires the eye of a philosophical artist to detect the axis; which, in other words is called the axis of the composition. If it is once admitted that no scene can be truly beautiful or satisfactory that is not more or less symmetrical, then we have only to search for this quality in every building or landscape presented for examination, for the purpose of supplying it where it is wanting, either by abstracting what interferes with it, or by the addition of what is necessary to render it effective or obvious. But, though every artist will allow this to be theoretically true, yet he will also allow that it requires great practical experience to be able to carry the idea into effect, especially in general scenery. In the case of a house, or a group of buildings, the difficulty is not great, because all the forms in buildings are definite and permanent; but in landscape, all the forms are indefinite, and continually changing by growth, by decay, and even by the seasons of the year. Those who have thought much on this subject, will discover that the idea of rendering every object or scene symmetrical, is but a more accurate and detailed analysis of the expression, "rendering any object or scene a whole." The advantage of treating the subject in this manner is like that of presenting the same object, under different points of view; we become better acquainted with it.

Breadth of effect has also been touched on before, because without it, that is, in common language, without broad naked surfaces or glades of turf among trees and shrubs, there must either be monotony or confusion in either a park or a pleasure-ground; monotony if the ground is uniformly covered with trees or shrubs, and confusion if it is covered a little more in some places than in others, but not sufficiently uncovered in any place to produce repose or breadth of effect, that is, masses of light or masses of shade. The use of these naked places in parks and pleasure-grounds, is, to contrast with the covered places; because it is, by this contrast, that what is called the effect is produced. In other words, a thing is what it is only by comparison with some other thing. If there were only one colour, there could be no such distinction of colours as red, blue, &c.; and if there were no light, there could have been no such thing as darkness. Every large object looks still larger when a small object of the same kind is placed near it; every particular form, such as a cube, appears still more definite or particular when it is opposed to a form of an opposite kind, such as a globe; and every colour appears more intense when it is placed adjoining its contrasting or complementary colour. In short, there is not a principle in the whole art of composition, whether of architecture or landscape-gardening, or, indeed, of any of the fine or mixed arts, so constantly brought into requisition as that of contrast, unless, indeed, it be that of connexion. The whole art of landscape-gardening, landscape-painting, and architecture, with reference to effect, may, indeed, be resolved into the exercise of these two principles.

There is one prevailing error which belongs to the department of landscape-gardening, which I have noticed, viz., the acute-angular forms of dug beds for flowers and flowering shrubs, which are commonly to be found on lawns. Beds, the outlines of which form acute angles, are bad in themselves, because they never can be completely covered with flowers or shrubs at the angles, and because if the eye of the spectator who observes them is not on a much higher level, the shape of the bed, of which the angle forms so conspicuous a feature when near, is not recognized. For all ordinary purposes, therefore, I consider acute-angled beds as ineligible; though, for symmetrical designs, in situations where the design is commanded by an elevated walk, or surrounding terrace, they may, with propriety, be introduced; because, in such situations, their forms and combinations display them to almost all the advantage of which they are susceptible. It is lamentable to see the pleasure-grounds of some of the finest old places in England spoiled by the introduction of these angular beds, in the most romantic or otherwise strongly marked scenes, that no man of taste would dare to touch; the beds perhaps planted with dahlias, hollyhocks, or China roses.

I wish I could strongly impress on the mind of every amateur, and of every gardener, that, for all general purposes of planting beds of shrubs, or beds of flowers on a lawn, to be laid out in the modern style, the best form is the circle, provided that it be always kept of small size, say from two to six feet in diameter. one circle never placed nearer to another than two feet, and that these beds be thrown together in groups or constellations, as stars are in the firmanent, or single trees and single shrubs in a well planted park.

I do not say that there are not cases where large angular masses, or long variously outlined shapes, may not be preferable to circles, or ought not to be introduced along with them. On the contrary, though in a park, I would effect the great part of the planting by single trees, and small groups, as I would on a lawn by circular beds of different sizes, yet there may be cases in both where a particular practice requires to take the place of a general one. The principles, indeed which guide the disposition of the kind of circular beds that I recommend, are exactly the same as those which guide the disposition and grouping of single trees. Wherever large masses of shrubs or flowers are wanted, there a greater number of circles of different sizes are to be brought together; and wherever any particular general form is to be produced, the body of that form may consist of beds in the form of circles, the general outline of which will constitute the form required. In short, as every mass of wood is composed of single trees, so every mass of shrubbery, or of flowers on a lawn, should or might be composed of single circular beds of different sizes.

Some persons who do not understand the difference between the effects of shapes on paper and shapes on ground, and between looking down on a lawn or flower-garden, and looking at it sideways, will object to having nothing but circles, as wanting in variety: but, in practice, it is found that, by combinations of circles of different sizes, more variety is produced than can be effected by the use of any other form whatever, unless we except small squares or small polygons, to which I have no objection except that the angles are not so easily filled up with flowers as circles. To show that combinations of circles are productive of more variety than any other form, I observe, first, that the circles, being always seen from the side of the combination, change their apparent position with every change in the position of the spectator; and secondly, that when the circles are planted with flowers, one or more of which in every bed rise to the height of two or three feet, the shape of the bed, whatever it may be, can never be recognised by the spectator from a side view. The size and the connexion, therefore, in this case, is of much more importance than the shape. As well might combination of single trees be objected to in a park, as combinations of small circular beds on a lawn; for, as a single tree, in combination with other single trees, is no longer a detached object, but forms a part of the whole to which it belongs, so a single circular bed, in combination with other circular beds, is no longer to be considered as a circle, but as the element of a combination which may form a varied and extensive figure, according to the circumstances of the situation and the object in view.

The only fear that I have in recommending circles is, least doing so I should be aiding the old system of clumping in parks; but I hope it will be borne in mind that I recommend no circles larger than five or six feet in diameter, and none to be placed in such an isolated position as to be unconnected with anything else, or to attract attention as single and detached objects.

*(To be continued.)*

# ARTICLE III.

## REMARKS ON OBTAINING HYBRID CORRÆAS, &c.

BY AN AMATEUR CULTIVATOR.

THE beautiful Corræa speciosa I obtained about twenty years back, and have grown it ever since, considering it one of the most neat and beautiful winter and early spring flowering plants. The other species introduced, and hybrid varieties that have been raised, since the former period named, I have obtained as soon as I could. I now possess twenty-six different kinds, and have had them in fine bloom since the beginning of November in my greenhouse, and I expect them to continue till May. Their beautiful tubular-formed flowers of varied colours, producing a pleasing contrast, render the entire family one of much interest. Four years back I commenced hybridizing, with a view to obtain other distinctive varieties between the best species I had, as C. speciosa, pulchella, &c. I have since raised a considerable number of varieties, and not two of them alike, varying either in colour, form, habit, or size. I was much astonished with the result, that from the same parent, there was such a dissimilarity after the process of an artificial impregnation. It is, however, well known that artificial or natural peculiarities can be, and are, transmitted from parent to offspring, in the vegetable as well as in the animal kingdom, although we cannot yet, and, perhaps, may never be able to account why such constitutional peculiarities are so transferred. Let us, then, be content with knowing that these peculiarities do exist; let us, likewise, multiply and register as many facts as bear directly or indirectly on the subject; and, from an accumulated store of this nature, something tangible may yet be deduced for future guidance. To know when the stigma is ready for dusting with pollen, to extract unripe anthers from an intended female parent, is so simple that it might be taught to a child in a few minutes; not so the means by which certain properties may be produced, and ultimately will probably be produced at pleasure, by cross fertilization: say, cross offspring with very dwarf and fruitful habits, or the reverse; very luxuriant habit with double flowers, or the contrary; and many other peculiarities, needless to mention here. Yet we have presumptive evidence already that all these states of existence are guided by certain fixed laws, and, perhaps, depend on the different states of developement of the vital principle in the parents. Any facts, therefore, tending to elucidate such laws or states of developement, cannot be but interesting to the physiologist, and of the greatest use to the hybridist. In the attention I have paid to this interesting pursuit, I have found that C. speciosa or C. pulchella may be both used for female parents: either of them may be tried with virens; but clear clean colours in the flowers of this cross cannot be expected, the thing being as much a matter of curiosity to ascertain the powers of crossing in this very interesting genus, which, like the fuchsia, is a favourite with every one. Virens and rufa will cross; but, in this case, virens alone has been used as the female parent, rufa being so insignificant a flower, it would be likely soon to reduce the flowers of virens in the offspring. From this cross, by breeding in and in, as the farmers say, a clear white flowering offspring may reasonably be expected in the third generation; while, by crossing in and in the highest-coloured varieties from speciosa and pulchella, I have obtained some deep crimson flowers. I have crossed a pure white seedling from virens and rufa, with a deep crimson variety, and procured clear intermediate colours. All the species and varieties I have tried with alba, and have raised some, but they have not yet bloomed.

The manner of conducting these experiments, may be useful to amateurs and young beginners. Take the healthiest plants you can procure; and, unless you have very healthy vigorous plants, go directly to the nursery, and procure a few of each sort, with plenty of blossom buds on the strongest leading shoots; this is the grand secret of the whole business. A practical gardener may take these from the greenhouse, or even cold frame, into 75 degrees of heat at once; but those not conversant with the treatment of plants would soon kill any plant by such a sudden transition. From the middle of February to the end of March is the best time to take the plants into the stove. Pinch off all the leading buds on the lateral shoots, but not on the leading shoots. As soon as the flower expands, extract the anthers from the intended female parent; and next day, or as soon as you perceive the pistils getting moist, apply the pollen, at the same time making two or three slits in the whole length of the corolla, to let out the sweet secretion often lodging on the germen. See that the decaying corolla does not damp off the style, which ought to be preserved till it dries off itself. As soon as you perceive the germen swelling, stop the leading shoots. Apply all safe stimulants till the seeds are ripe, but do not let the plant expend its energies in the production of young wood. Pinch off every bud as it offers to expand. Keep the plant or plants as near the glass as possible all the time, and sow the seeds as soon as ripe. Seedlings produced in the greenhouse will not be near so vigorous as those in the stove; and their being originated in heat does not alter their hardiness in the least.

# ARTICLE IV.

## THE HISTORY OF GARDENING.

BY CLERICUS.

*(Continued from page 40.)*

One man, one great man we had, on whom nor education nor custom could impose their prejudices; who, "on evil days though fallen, and with darkness and solitude compassed round," judged that the mistaken and fantastic ornaments he had seen in gardens, were unworthy of the Almighty Hand that planted the delights of Paradise. He seems, with the prophetic eye of taste, to have conceived, to have foreseen modern gardening; as Lord Bacon announced the discoveries since made by experimental philosophy. The description of Eden is a warmer and more just picture of the present style than Claude Lorraine could have painted from Hagley or Stourhead. The first lines I shall quote exhibit Stourhead on a more magnificent scale:—

Thro' Eden went a river large,
Nor chang'd his course, but through the shaggy hill
Pass'd underneath'd ingulph'd, for God had thrown
That mountain as his garden mound, high rais'd
Upon the rapid current.

Hagley seems pictured in what follows:—

Which through veins
Of porous earth with kindly thirst updrawn,
Rose a fresh fountain, and with many a rill
Water'd the garden.

What colouring, what freedom of pencil, what landscape in these lines!

From that sapphire fount the crisped brooks,
Rolling on orient pearl and sands of gold,
With mazy error under pendent shades
Ran nectar, visiting each plant, and fed
Flow'rs worthy of Paradise, which not nice art
In beds and curious knots but nature boon
Pour'd forth on hill, and dale, and plain,
Both where the morning sun first warmly smote
The open field, and where the unpierc'd shad
Imbrown'd the noon-tide bow'rs. Thus was this place
A happy rural seat of various view.

Read this transporting description, paint to your mind the scenes that follow, contrast them with the savage but respectable terror with which the poet guards the bounds of his Paradise, fenced

With the champaign head
Of a deep wilderness, whose hairy sides
With thicket overgrown, grotesque and wild,
Access denied; and overhead upgrew
Insuperable height of loftiest shade,
Cedar and pine, and fir and branching palm,
A sylvan scene, and, as the ranks ascend,
Shade above shade a woody theatre
Of stateliest view;—

And then recollect that the author of this sublime vision had never seen a glimpse of anything like what he has imagined, that his favourite ancients had dropped not a hint of such divine scenery, and that the conceits in Italian gardens, and Theobalds and Nonsuch, were the brightest originals that his memory could furnish. His intellectual eye saw a nobler plan, so little did he suffer by the loss of sight. It sufficed him to have seen the materials with which he could work. The vigour of a boundless imagination told him how a plan might be disposed, that would embellish nature, and restore art to its proper office, the just improvement or imitation of it.

It is necessary that the concurrent testimony of that age should swear to posterity that the description above quoted was written above half a century before the introduction of modern gardening, or our incredulous descendants will defraud the poet of half his glory, by being persuaded that he copied some garden or gardens he had seen—so minutely do his ideas correspond with the present standard. But what shall we say for that intervening half century who could read that plan, and never attempt to put it in execution?

Now let us turn to an admired writer, posterior to Milton, and see how cold, how insipid, how tasteless, is his account of what he pronounced a perfect garden. I speak not of his style, which it was not necessary for him to animate with the colouring and glow of poetry. It is his want of ideas, of imagination, of taste, that I censure, when he dictated on a subject that is capable of all the graces that a knowledge of beautiful nature can bestow. Sir William Temple was an excellent man; Milton a genius of the first order.

We cannot wonder that Sir William declares in favour of parterres. fountains, and statues, as necessary to break the sameness of large grass-plats, which he thinks have an ill effect upon the eye, when he acknowledges that he discovers fancy in the gardens of Alcinous. Milton studied the ancients with equal enthusiasm, but no bigotry, and had judgment to distinguish between the want of invention and the beauties of poetry. Compare his Paradise with Homer's Garden, both ascribed to a celestial design. For of Sir William, it is just to observe, that his ideas centered in a fruit garden. He had the honour of giving to his country many delicate fruits, and he thought of little else than disposing them to the best advantage. Here is the passage I proposed to quote; it is long, but I need not make an apology to the reader for entertaining him with any other words instead of my own:—

"The best figure of a garden is either a square or an oblong, and either upon a flat or a descent: they have all their beauties, but the best I esteem an oblong upon a descent. The beauty, the air, the view, makes amends for the expense, which is very great, in finishing and supporting the terrace walks, in levelling the parterres, and the stone stairs that are necessary from one to the other.

"The most perfect figure of a garden I ever saw, either at home or abroad, was that of Moor Park, in Hertfordshire, when I knew it about thirty years ago. It was made by the Countess of Bedford, esteemed among the greatest wits of her time, and celebrated by Doctor Donne; and with very great care, excellent contrivance, and much cost; but greater sums may be thrown away without effect or honour, if there want sense in proportion to money, or if nature be not followed, which I take to be the great rule in this, and perhaps in every thing else, as far as the conduct not only of our lives, but our governments."

We shall see how natural that admired gardener was:—

"Because I take the garden I have named to have been in all kinds the most beautiful and perfect, at least in the figure and disposition, that I have ever seen, I will describe it for a model to those that meet with such a situation, and are above the regards of common expense. It lies on the side of a hill, upon which the house stands, but not very steep. The length of the house, where the best rooms and of most use or pleasure are, lies upon the breadth of the garden; the great parlour opens into the middle of a terrace gravel walk that lies even with it, and which may lie, as I remember, about three hundred paces long, and broad in proportion; the border set with standard laurels, and at large distances, which have the beauty of orange trees out of flower and fruit. From this walk are three descents by many stone steps, in the middle and at each end, into a very large parterre. This is divided into quarters by gravel-walks, and adorned with two fountains and eight statues in the several quarters. At the end of the terrace-walk are two summer-houses, and the sides of the parterre are ranged with two large cloisters open to the garden, upon arches of stone, and ending with two other summer-houses even with the cloisters, which are paved with stone, and designed for walks of shade, there being none other in the whole parterre. Over these two cloisters are two terraces covered with lead and fenced with balusters; and the passage into these airy walks is out of the two summer-houses at the end of the first terrace-walk. The cloister facing the south is covered with vines, and would have been proper for an orange-house, and the other for myrtles or other more common greens, and had, I doubt not, been cast for that purpose, if this piece of gardening had been then in as much vogue as it is now.

"From the middle of this parterre is a descent by many steps flying on each side of a grotto that lies between them, covered with lead and flat, into the lower garden, which is all fruit-trees ranged about the several quarters of a wilderness, which is very shady; the walks here are all green, the grotto embellished with figures of shell rock-work, fountains, and water-works. If the hill had not ended with the lower garden, and the wall were not bounded by a common way that goes through the park, they might have added a third quarter of all greens; but this want is supplied by a garden on the other side of the house, which is all of that sort, very wild, shady, and adorned with rough rock-work and fountains.

"This was Moor Park when I was acquainted with it, and the sweetest place, I think, that I have seen in my life, either before or since, at home or abroad."

I will make no further remarks on this description. Any man might design and build as sweet a garden, who had been born in and never stirred out of Holborn. It was not peculiar to Sir William Temple to think in that manner. How many Frenchmen are there who have seen our gardens, and still prefer natural flights of steps and shady cloisters covered with lead.

Fortunately Kent, and a few others, were not quite so timid, or we might still be going up and down stairs in the open air.

(*To be continued.*)

## ARTICLE V.

### OBSERVATIONS ON THE ERANTHEMUM PULCHELLUM.

BY A PRACTICAL GARDENER.

I OBSERVE in two or three of the late numbers of the CABINET that you recommend the forcing of several old and beautiful flowering plants for adorning the sitting-room, conservatory, greenhouse, &c., during the winter months. One amongst the others is that fine old plant Eranthemum pulchellum, its lovely rich blue flowers, produced in profusion, being one of the most attractive which can be grown.

I am a practical gardener, of twenty years experience therein, more especially, too, in plant growing in a nobleman's establishment, where forcing is carried on to a large extent. The plant in question is one of my favourites, and I now have (January 29th) six fine plants in profuse bloom, and six more the flowers of which are just peeping. The mode of treatment is as follows:—

As soon as the plants have ceased blooming, I have them repotted, taking away all the old compost I can without injury to the plants. This operation usually takes place by the end of May or in June, replace them in warmth, and they become well established by August or September. As I take care not to have the pots too large, they are generally well filled with roots by that period. I then remove them into a cooler but light situation, and only just give water to keep them alive. This tends to check growth, and induces the formation of flower buds. When this is accomplished, I have plants, as required, successively introduced into the *moist* atmosphere of the plant-stove, forcing-house, &c.; and a continuous succession of plants, in beauteous bloom, is kept up through the entire of winter and early spring months.

Whilst on this subject, I take the opportunity to recommend the culture of Cinerarias for affording a splendid and pleasing variety of interesting flowers for winter and spring blooming. They are very easy of cultivation, and very prolific in a great variety of floral beauty. An additional recommendation is, they are to be procured at a very reasonable price, and easily increased either by offsets or seed.

The Indian Azaleas, and both single and double kinds of Chinese Primroses, are also well deserving attention, all equally easy of successful cultivation. Where there is not the facility of a forcing-house, plant-stove, &c., a small brick pit, heated by hot water, in the tank system, or in close pipes having troughs upon the upper side, in which water can be kept to moisten the air in a due degree, or brick flues, with tin or zinc pans to hold water, over the surface to afford the like advantage, may be erected in a very simple, cheap, and effective manner, at a trifling cost. The pleasure the productions would afford would most amply repay. When plant forcing ceased in such an erection, it would be found serviceable to force any vegetable, fruit, &c.

## REVIEW.

*Observations on the Cultivation of Roses in Pots, by W. Paul; Nurseries, Cheshunt, Herts.* Published by Sherwood, Gilbert, and Piper, Paternoster-row, London. pp. 32.

(*Continued from page* 17.)

*Classes preferred.*—The classes of Roses that can be practically recommended for growing in pots, are, Moss, Provence, Alba, Gallica, Hybrid, Perpetual, Hybrids of the Chinese and Bourbon, Noisette, Bourbon, Chinese, and Tea-scented. The Boursault, Ayrshire, and Sempervirens, are pretty, grown as climbers, but are not fitted for exhibition.

*(S.) Moss.*—There are but few varieties of Moss Roses that can be

recommended for pot-culture; still, these few, cast among the many, give a great degree of distinctness to a collection; and they certainly cannot be dispensed with anywhere:—Blush, blush pink. Belina, rich crimson, shot with purple. Cristata, bright rose. Du Luxembourg,* fine crimson purple. Lancel, bright rosy purple. Prolific, rose. Unique, pure white. Veillards, pale rose.

*(S.) Provence.*—This is an excellent class of Roses for growing in pots; and the old Cabbage Rose must be excluded. The whole of them are sweet—very sweet; and their pendulous growth gives them a very graceful appearance. The flowers are large, well formed, and, in shape, mostly globular:—Anais Ségalas, rosy lilac. Angers, fine bright rose. *D'Abbeville, cherry rose, vivid. D'Avranches, blush pink. La Fiancée, pale flesh. Laura, rosy lilac. Pompon de Laqueue, flesh. Queen of the Provence, blush lilac. Sylvain, brilliant rose.

*(S.) Alba.*—It is here we find that beautiful style of Rose, the edges of which are white, with pink centre, in the greatest perfection. The flowers are not of the largest dimensions; but the fine shape and elegant arrangement of the petals more than compensate for the slight deficiency in size. The Albas are bold, but not rampant growers:—Belle de Segur, fine blush. Blush Hip, blush, rose centre. Félicité Parmentier, beautiful blush. Henriette Campan, light rosy purple. La Séduisante, pink, edges pale. Princess Lamballe, pure white. Sophie de Bavière, clear light rose. Sophie de Marcilly, flesh, edges pale.

*(S.) Gallica.*—These are of first merit as show Roses: they are of compact growth, particular regularity of petal, and fine outline. There is also a great variety and richness of colour among them; and they are, for the most part, very fragrant:—Adèle Prevost, silvery blush, fine form. Aurelie Lemaire, pale rose. Arthemise, deep crimson purple. Beauté Vive, bright crimson. Belle Satinée, rosy pink. Bizarre Marbrée, rose, marbled with white. Blanch Fleur, fine flesh white. Boula de Nanteuil, brilliant crimson and purple. Comte de Murinais, purple, spotted with red. Cynthie, beautiful silvery blush. D'Aguessau, deep bright crimson. *Duc de Bassano, dark red, spotted with white, distinct. *Duc de Trevise, crimson purple. Duchesse d'Abrantes, pale rose. Docteur Dielthem, bright shaded rose. Dumont d'Urville, deep red, fine. En-

chantress, pale rose. Fleur d'Amour, bright crimson changing to purple. Graim Dok, crimson and purple shaded. Grain d'Or, bright rose, marbled with purple. Grandissima, bright purplish crimson, beautiful. Jeanne d'Urfé, crimson and lilac. Julie d'Etanges, pale rose. Kean, scarlet and crimson, fine. Latone, pale rose. La Volupté, bright deep rose. Leo the Tenth, large rose, blush edges. Louis Philippe, superb dark rose. Melanie, fine crimson. Nero, violet crimson, spotted. Nouvelle Provins, deep crimson purple. Omphale, rose, finely spotted. Oracle du Siècle, dark crimson, shaded with purple. Pergolise, fine crimson. Pharericus, beautiful deep rose. Shakspeare, rose, scarlet centre. Surpassé tout, cherry.

*Hybrid Perpetual.*—These Roses have become universal favourites, and deservedly so. Their foliage is grand, and the flowers of some kinds are finely shaped. The rapid influx of new varieties has increased and improved this class surprisingly within the last three or four years. They have hitherto run too much on one colour—crimson purple; but this is every season being remedied, and there doubtless will soon be as great a variety as in other classes. Some of these will be given as Pyramid Roses, for which they are well suited, blooming fine both in summer and autumn. They are excellent forcing Roses, and very sweet:—Aricie, large rosy lilac. Aubernon, beautiful rosy crimson. Baronne Prevost, large pale rose. Clementine Duval, rose and lilac. Comte de Paris, superb purple and crimson. Coquette de Montmorency, brilliant cherry. Dr. Marjolin, beautiful light red. Duc d'Aumale, deep crimson. General Merlin, light rose, shaded. Lady Alice Peel, deep rose. Lady Elphinstone, rose blooming in clusters. La Reine, large lilac, satin-like, superb. Marquisa Boccella, fine blush, very sweet. Mrs. Eliot, deep rosy lilac. Princesse Hélène, bright rosy purple. Rivers, red, sometimes carmine. William Jesse, large crimson, tinged with lilac. The Damask Perpetuals are fine Roses, but few of them appear adapted for pot culture.

*Damask Perpetual.*—Du Roi, or Crimson, bright crimson. Josephine Antoinette, clear blush.

*(S.) Hybrids of the Chinese and Bourbon.*—Many of this class are profuse bloomers, and some perfect models in form. There are also to be found here some brilliant-coloured Roses. The Hybrid

Bourbons are remarkable for their robust habit and bold foliage. Many of them form fine Pyramid Roses in pots:—Belle de St. Cyr, pretty bright rose. Briseis, fine rosy blush. Camuzet Carné, delicate peach, very distinct. Coupe d'Amour, bright rose. Coupe d'Hebe, beautiful deep pink. General Allard, full deep rose. La Colombienne, lilac rose, satin-like. Lady Stuart, fine full blush. Madeleine, pale flesh, edged with crimson. Marie de Nerrœa, light pink blush. Velours Episcopal, violet purple. Triomphe de Guerian, large blush, rose centre.

*Noisette.*—On account of blooming fine so late in the season, the Noisettes form a very valuable class of Roses. The most of them are better trained as climbers: in which way their large trusses of bloom produce a very pleasing effect. Under this method of growth, then, we shall class the most of them, but a very few may be retained here:—Aimée Vibert, pure white. Comtesse de Tolozan, white, sometimes flesh. La Victorieuse, white, finely shaded with rose. Le Pactole, fine yellow. Miss Glegg, beautiful pure white. Solfatare, large sulphur. Vitellina, flesh centre, whitish yellow, tender.

(We shall give in a future number the other varieties Mr. Paul recommends, but in the mean time, advise Rose fanciers to procure the pamphlet.)

# PART II.

## LIST OF NEW AND RARE PLANTS.

AERIDES ODORATUM. FRAGRANT AIR-PLANT. (Bot. Mag. 4139.) Orchideæ. Gynandria Monandria. One of the most lovely Orchideous Epiphytes. Introduced from the East Indies. The beautiful, delicate, and highly fragrant flowers are produced in pendant spikes, eight or ten inches long. Each blossom is an inch across, of a delicate cream colour, fleshy, spotted and blotched with purple. It blooms during the summer months. It is a pretty and highly interesting species.

BERBERIS TRIFOLIATA. THREE-LEAVED BARBERRY. (Bot. Reg. 10.) Berberaceæ. Hexandria Monogynia. Mr. Hartweg discovered this rare and handsome species in Mexico, on an immense plain, occupied chiefly by Opuntias, stunted plants of Prosopis, and Yuccas. The fruit is much eaten by children. It is a dwarf-spreading evergreen shrub, growing very freely. It has stood two winters against a south wall in the London Horticultural Society's Garden. The leaves are trifoliate, about three inches long, much scolloped at the edges, and spiny. The flowers are yellow, each being about three quarters of an inch across, blooming in April and May.

CRYPTADENIA UNIFLORA. SOLITARY-FLOWERED. (Bot. Mag. 4143.) Thymeleæ. Octandria Monogynia. (Synonym, Passerina uniflora.) It is a native of the Cape, forming a neat and pretty Heath-like greenhouse plant. The flowers are solitary, terminal, and, having numerous shoots, produce a showy appearance. Each blossom (star-shaped) is near an inch across, of a pretty pink, with a streak of deep rosy-red down the middle of each petal.

**Disocactus biformis.** Two-shaped Torch-Thistle. (Bot. Reg. 9.) Cactaceæ. Polyandria Monogynia. Sent from Honduras to the collection of Sir Charles Lemon, Bart., M.P. It forms a graceful bush, from two to three feet high. The flowers are solitary, drooping, of a deep pink, each blossom being near three inches long. Early in September the plant produces a profusion of beautiful berries, shaped like a small egg, about the size of a common sloe. They are of a pretty purple-crimson. One plant at Carclew produced eight dozen fruit. It has a very pretty appearance, and especially ornamental when in its ripe-fruit state. It does well in a warm greenhouse, and well merits a situation there.

**Miltonia cuneata.** Wedge-lipped. (Bot. Reg. 8.) Orchideæ. Gynandria Monandria. It is a very beautiful flowering Orchideous Epiphyte, which has bloomed in the collection of Messrs. Rollisson's. The flowers are produced in fine racemes. Each blossom is near four inches across. Sepals and petals a rich brown, tipped with green. Lip pure white, with a tinge of pink near the base. It deserves a place in every collection.

**Solanum macranthum.** Large-flowered. (Bot. Mag. 4138.) Solaneæ. Pentandria Monogynia. A native of Brazil, a tree-like plant, growing to the height of twelve or fourteen feet. The flowers are of a fine blue-lilac colour. Each blossom is about two inches and a-half across. The leaves are large, and the veins on either side are studded with prickles. It is in the stove of the Royal Botanic Gardens of Kew.

**Lælia majalis.** The May-flower Lælia. (Pax. Mag. Bot.) Orchideæ. Gynandria Monandria. From the more temperate parts of Mexico. The flower scape is from six inches to a foot long. Each blossom is six or seven inches across. Sepals and petals of a beautiful deep lilac. Lip a rich purple, with a lilac tinge at the centre, and a yellow streak towards the base.

**Acanthophippium Javanese.** A beautiful Orchideous plant from Batavia; it has bloomed in the collection of Messrs. Loddiges. The flowers are produced at the top of the scape to the extent of about six inches. The sepals and petals are of a very pale buff colour, tinged with purple. Lip pale yellow, with blotches of purple along the margins.

### Plants noticed in Botanical Register, not figured.

**Maxillaria triangularis.**—From Guatemala. The flowers are of a rich cinnamon-brown, beautifully mottled, with crimson marks. In the collection of the London Horticultural Society.

**Epidendrum aeridiforme.**—From Rio, and is in the collection of Sir Charles Lemon, Bart. Flowers produced in panicles. Sepals and petals of a dull green, tinged with brown. Labellum white, with a flesh-coloured tinge.

**Ceradia furcata.**—It has bloomed in the collection of Messrs. Rollisson, of Tooting. It has a relation to the formerly called Cacalias. At the summit of the branches grows a cluster of succulent leaves, and a few solitary flower-heads of a pale yellow colour.

**Pitcairnia ringens.**—From Demerara. It is in the collection of the Duke of Bedford. It is a stove plant, produces long spikes of fine crimson flowers.

**Lennea robinioides.**—A greenhouse shrubby plant, of the Lotus tribe. It has small pinnated leaves, and clusters of pretty drooping crimson flowers. It blooms during the spring months, and is a very interesting object.

**Salvia tubiformis.**—An evergreen greenhouse plant, producing spikes of scarlet flowers. It is a native of Mexico, and is a very showy species for outdoors during summer, being very ornamental.

**Oxalis discolor.**—From Mexico, and has bloomed in the Berlin Botanic Garden. The flowers are of a violet-crimson, about an inch across.

**Scelochilus Ottonis.**—An Orchideæ Epiphyte, from the Caraccas. It has bloomed in the Berlin Garden. It has the habit of Burlingtonia. The flowers are about half an inch across, of a pretty yellow colour.

**Tillandsia vitellina.**—From Venezuela, having the habit of a Pine-Apple plant, with small yellow flowers.

**Tigridia lutea.**—Flowers yellow, but has not the beauty of the common Tigridias.

# PART III.

## MISCELLANEOUS INTELLIGENCE.

### QUERIES.

**On destroying Slugs.**—If some correspondent would inform me the best method of destroying slugs, by which I am much annoyed, I should feel greatly obliged. A Beginner.

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**A List of Perpetual Roses.**—I am desirous, in the March Cabinet, to have a list of ten of the best kinds of Perpetual Roses. P.

*Damask Perpetuals, having the fragrance of the Damask Rose.*

Antinous, dark crimson purple.
Bernard, rich carmine-salmon.
Carmin Royal, light showy crimson.
Du Roi, or Perpetual Crimson, deep.
Stanwell's Perpetual, delicate flesh.
Louis Phillippe, dark purple crimson.
Madame Thelier, fine pale pink.
Minerva, beautiful blush.
Portland Blanc, pure white
Laurence de Montmorency, shaded carmine.

*Hybrid Perpetuals, partaking of the fragrance of the Damask, but more showy.*

Clementine Seringe, fine pale rose, very large.
Fulgorie, deep rosy-crimson.
Coquette de Montmorency, beautiful rosy-cherry colour.
Madame Laffay, deep rich, fine rosy-crimson.
Prudence, centre deep rose, edges light.
Robin Hood, bright cherry-red.
William Jesse, bright pink.
Reine de Lyon, brilliant crimson.
Louis Buonaparte, deep crimson-red.
Lady Fordwich, rich beautiful rose.

*Bourbons (Perpetual).*

Augustine Lelieur, beautiful bright fulgent rose.
Acidalie, delicate blush-white, beautiful.
Charles Souchet, deep crimson-violet.
Comice de Seine, very rich crimson.
Gloire de Rosomene, splendid carmine-crimson.
Dumont de Courset, rich velvet-purple.
Glorie de Paris (Souchet's), bright red, shaded with crimson.
Madame Lacharme, beautiful white.
Proserpine, rich deep red.
Le Grand Capitaine, crimson-scarlet, fine.

**On Australian Seeds.**—I enclose a specimen of some seeds I received from Australia. Can you inform me what they are, as, unfortunately, the name did not come with them? I have sown some twenty seeds, and am afraid to remove weeds, &c., not knowing what to expect; consequently, I cannot tell whether they really have come up or not. Perhaps you will try them.

Can you also inform me what the Sparaxis grandiflorus is?

Once more,—What is the Raspberry Jam Tree (Swan River)? It appears to be a species of Acacia. Three plants have come up, and appear to be doing well.

I cannot lay down my pen without paying a well-deserved compliment to the untiring energy of the Conductor of the Floricultural Cabinet, and the liberality of those persons who from time to time have favoured us with details of successful modes of cultivation of our choicest flowers.

Suburbanus Norvicensis.

[The seeds are from a plant of the Syngenesiarus class, probably one of the Helianthus, or some other of that class. The Sparaxis is allied to the Ixia tribe; it is a very beautiful flowering species. We will give the particular account of the Swan River Tree, from a resident there, in our next.—Conductor.]

**On Mandevillia suaveolens.**—How am I to raise plants of Mandevillia suaveolens? An early reply will oblige,
Lucy.

[If there be any short shoots, say six inches long, cut them close to the mother branch, and insert them in sand; place them where they will have bottom heat, cover the pot with a bell-glass, and they will readily root. Water, of course, must be given as requisite, &c. If there be no short shoots, cut the leading portions of others, close under a joint, horizontally through, and insert firmly such, which, though not to be depended upon as the others, nevertheless they succeed tolerably well.—Conductor.]

## REMARKS.

**On a List of Flowering, Climbing, Shrubby Plants to cover a South Wall.**—Twelve months back I planted an open south-aspected wall with the following kinds of training plants. They grew admirably last summer; and now, although the frost has been very severe, they do not appear to have suffered in any degree. I send the list, as it may be a guide to others.

Berkshire. An Amateur.

Acacia dealbata
Alstrœmeria acutifolia
—— hirtella
Ampelopsis hederacea
Apios tuberosa
Aristolochia Sipho
Caprifolium dioicum
—— etruscum
—— pubescens
—— sempervirens and its varieties
Ceanothus azureus
—— collinus
Cercis Siliquastrum
Chimonanthus fragrans and its varieties
Clematis azurea
—— florida
—— montana
—— Sieboldii
—— viticella
—— —— plena
Convolvulus bryoniæfolius
Cratægus Pyracantha
Cydonia japonica and its varieties
Deutzia scabra
Eriobotrya japonica
Erythrina Crista-galli
Grevillea rosmarinifolia
Jasminum officinale and varieties
Kerrya japonica flore-pleno
Leycesteria formosa
Magnolia conspicua
—— grandiflora
Mahonia aquifolium
Mimosa marginata
Mutisia ilicifolia
Myrtus communis and varieties
Passiflora cærulea and varieties
Punica granatum and varieties
Ribes sanguineum
Solanum crispum
Sollya heterophylla
Tecoma radicans
—— —— major
—— grandiflora
Wistaria sinensis

With roses of various kinds.

On preserving Pinks, Carnations, &c., from Rabbits.—Last year my Pinks and Carnations were almost entirely destroyed by rabbits during a storm, and all means I could devise proved a failure. I was advised this winter to take some strips of rags as broad as my hand and about a foot long, and dip them into melted sulphur, and then fix them into clefted sticks about half a yard high, allowing the rags to dangle about as flags, these I was to place in, and around the beds at about four feet apart. I adopted the plan, and though the temptation has been great during the last few weeks of storm, not one has ventured to touch the Pink or Carnation-beds, nor where I had placed a prepared flag at the side of a single plant in the border.

February 3, 1845. A Northern Florist.

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On Guano for Pot Plants, &c.—In reply to A. B., in a former number, on Guano, I beg to inform him, that it should be mixed with about five times its bulk of earth, and pot in the same any strong growing plants, as Pelargoniums, &c. On the open border it should be given about the same strength, applying it in wet weather. When the Guano comes into immediate contact with seeds it is injurious to them, so that it is best to carefully mix up the same with a proper quantity of soil before spreading upon the ground, afterwards dig it in. When applied in a liquid state do it weakly to commence with, and as its effects are soon visible, it may be regulated as appearances suggest. So very different are the constitutions of plants that no exact standard can be arranged, and experience will dictate the best. A.

On destroying Thrip.—Mr. J. Barnes, of Bicton, says, "I take a peck and a half of soot, and put it into one hogshead of soft water, stirring it well with an old broom or batten, every day for ten days or a fortnight. I then strain off the water through a fine sieve, or piece of canvass, into another tub, on a peck of charcoal, and drop into it afterwards one or two lumps, or about three pounds of fresh lime; in about two days after I strain it again, and it is then clear enough to syringe any plant or plants with. It will not only extirpate thrip, but many other troublesome insects also; and it is famous liquor to syringe with, whether for destroying insects or not, as it induces general vigour and healthiness amongst plants of all kinds."

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Moss a Protective Material from Frost.—For several years I have used moss, gathered from the woods, to protect my China, Bourbon, and other Roses, from frost; and, from recent experience, am so firmly convinced of its beneficial effects, that I feel the information cannot be too widely spread. My practice has been to place round each plant a quantity of moss, in the shape of a cone, averaging fifteen to eighteen inches in width at its base, nine inches at its summit, and from twelve to fifteen inches in depth. We have had scarcely any snow here, so that, in the night of Tuesday, the 11th instant, the ground was nearly bare of snow; on Wednesday morning, observing that my thermometer, placed on the northern side of a tree, about six feet from the ground, in an exposed situation, registered 26° of frost, I felt curious respecting the efficacy of my moss protectives. To my agreeable surprise I found, that under cones of moss not more than nine inches deep, owing to their settlement from the rains of winter, the soil was not frozen in the least degree, and the young shoots and buds of the Roses, at the bases of the plants, fresh and vigorous as in the mildest weather. I have hitherto recommended moss, when used as a protective for Roses—not to be placed in contact with the branches of the plants, fearing the effects of damp during the humid weather of a great portion of our winters; but, owing to my men not exactly going according to orders, many of my protective cones have been placed closely round the plants: no injury from damp has resulted, and their appearance is highly promising. From having thus so recently experienced the sure and certain protection from frost that moss gives, my ideas have taken a wider range, and I feel convinced that Pelargoniums, by having their leaves taken off from the bases of their shoots towards the end of October, and a cone of moss placed round each plant, may be preserved in our open borders during our severest winters, without injury. Fuchsias, hardy greenhouse plants, half-hardy evergreens, and many other desirable plants, may also be preserved in our open borders. We may thus be able to have them established, and of many years' growth, in our gardens, instead of transplanting them annually, as at present in May; for by the time their roots are well established, frost comes and obliges us to remove them into winter quarters. By protecting them with moss, the lower parts of Pelargoniums and Fuchsias will alone be preserved; but these, as is well known, are full of buds, and their roots being perfect, the plants, after being headed down, will shoot most vigorously, far beyond plants only recently transplanted. It is not, perhaps, generally known that many tender evergreens will suffer but little in their branches from severe frost, if their roots are well protected. To such moss may be applied unsparingly, with the certainty of pleasing results.—*Thos. Rivers*, (*Gardeners' Chronicle.*)

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REMARKS ON CHARCOAL USED IN COMPOST FOR POT PLANTS, BY MR. JAMES BARNES.—It has been said that the fertilising properties of charcoal, as a manure, have been long known, although it was merely by accidental observation I first discovered its value in horticulture: in my opinion it has not yet met with that attention which its merits deserve. Since my application and use of charcoal have been made known, I have received many interesting communications from practical gardeners and amateurs, expressing their conviction of its valuable properties; in other cases there seems to have been some mystery or uncertainty attending its application, for the result has not been so successful: such always has been the case in similar matters, and, doubtless, will continue to be.

I will here attempt to explain, or rather state, the principal object that must be kept in view, by all those who would wish to avail themselves fully of the fertilising qualities of charcoal, when applied as a manure; one of its most useful qualities, then, consists in its affording thorough drainage, and thereby maintaining a kindly communication between the atmosphere and the earth, without which but a trifling degree of benefit will be derived from its fertilising properties. Other good qualities consist in its absorbing and condensing powers, and in its giving off slowly and permanently, so long as in communication with the atmosphere, those natural gasses which are most fitted for promoting the growth of vegetation. To these qualities I attribute its excellence. I have invariably found that plants to which charcoal have been applied, and which have thus had thorough drainage of the soil secured, have continued in the most luxuriant condition, the roots not only numerous, but also in high vigour, and clinging around it, and penetrating the cracks and fissures; whereas in cases of slovenly or imperfect drainage, quite another effect has been produced, and but trifling benefit realised from its application.

Thorough drainage should certainly, for all purposes of cultivation, be the first consideration—the standing rule and foundation stone with all cultivators of the soil. Its effect is to admit the natural gasses of the atmosphere to act in combination with the salts and bases of the earth; thus securing the most natural and perfect results.

DESTRUCTION OF RED SPIDER, THRIP, &c.—"Delta," at p. 749, mentions the circumstance of a paper having been read before the Horticultural Society of London, August 2, 1837, respecting Laurel leaves being used, when bruised, for destroying these pests. As a practical man I can speak from experience on this subject. Being in the habit of growing Melons and Cucumbers rather extensively for some years, of course I have been troubled with these insects as well as my brother gardeners, and this year rather more than usual. The method that I have adopted for many years for killing the red spider, thrip, and green-fly, is as follows:—When the plants appear attacked with these insects, I get a quantity of Laurel bruised, and put it into the frame or frames, as it may be, about 3 o'clock P.M. It should be dispersed all over the frame, but by no means allowed to touch the leaves of the plants—for, if you do, it is sure to affect them very materially; then shut down the lights as closely as you possibly can; and should the sun be very fervent at the time, I always throw a single mat over the frame, in order to prevent the leaves of the plants from being burnt. The heat to which I allow the frame to rise is from 90° to 100°; never allow it to rise above that point, or you will be sure to lose plants, crop, and all. The length of time that I allow this heat to remain in the frame is two hours only; this time may perhaps appear short, but such is the fact. About 6 o'clock the mat is taken off, and a little more air is admitted to the plants. On the next morning, the Laurel is all taken out, and the plants are well syringed with warm water, and of course shaded during the day. I am certain that, by the evening of the second day, there is not the slightest appearance of thrip or spider. If " Delta" will try this plan, he may be sure of success.—*Devoniensis, (Gardeners' Chronicle.)*

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ON A SUBSTITUTE FOR GLASS.—Whitney's prepared calico has wholly failed with me, as well as with numerous other persons. I prepared a covering as follows, last April, and it has answered every desired expectation. " Three pints of old pale linseed-oil, one ounce of sugar of lead, and four ounces of white resin. The sugar of lead must be ground with a small quantity of the oil, and added to the remainder, incorporated with the resin by means of gentle heat. The composition is to be laid on by a brush, after the calico is nailed to the frames. One coat annually is sufficient. It dries in a short time when exposed to the air; and excludes as little light and heat as anything, except glass, and does not become mildewed."

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HYACINTH STANDS.—Instead of glasses, China stands are now used in many instances and found to answer better. The roots are kept in the dark, which is more congenial to their growth. They have proper wire supports made to suit. They are as cheap as the glass ones. They can be had in London, or soon made to order.

FUCHSIAS FOR BORDERS.—Several correspondents have requested us to give a list of the best kinds of Fuchsias, being the most capable to endure the open air in this country. We have many hundreds growing in beds, and along borders by the sides of walks, &c., and find that nearly every one will succeed well with the exception of Fulgens and Corymbiflora, though both kinds, even when cut down to the ground in winter, have pushed up again in spring. We find that the hard wooded kinds do the best, such as Baxteri, elegans, virgata, formosa elegans, globosa major, globosa rosea, and those of a similar habit. There are many splendid hybrids raised between the soft wooded and hard wooded kinds, which we find do admirably well; most of the recent new kinds are of that class. The nearer they approximate to fulgens and corymbiflora, the less hardy. We could give a long list of the new sorts that we have found to do well, but there being so few that do not, we deem it unnecessary. If persons who have not such kinds, and request sorts that will do, if that was mentioned in the order they gave to a nurseryman, the object could be accomplished. They are so ornamental, keep so many months in bloom, either in or out doors, as to deserve growing wherever they come. CONDUCTOR.

TROPÆOLUM TRICOLORUM, &c.—It occasionally happens that a tuber of the Tropæolum tricolorum, &c., will push roots freely, but not a shoot. When this occurs, if a shoot can be obtained, cut it close under a joint, make an incision in the side of the tuber, and put in the cutting (or graft) in the same way grafting is usually done, cover it with a bell-glass, and place it where there is gentle moist temperature, and very soon it will unite, and grow vigorously, if otherwise properly treated. The same plan is applicable to other kinds.

ON DESTROYING A WASP'S NEST.—Having the misfortune of a wasp's nest in my flower-garden, immediately under the root of a double-flowered white Clematis, I was anxious to destroy the wasps, and not injure the plant. This I succeeded in by taking some spirit of turpentine, and pouring a portion into a glass bottle, taking care the spirit was smeared all over the inside of the bottle. I then turned the bottle upside down, and put the neck of the bottle in the hole leading to the nest, doing so after dusk. The next morning I found every wasp dead. MARY.

Evesham, July 20th, 1844.

GLYCINE SINENSIS.—Last year, in August, I had a number of shoots of a Glycine sinensis thinned out of a plant growing against a south-aspected wall, and I cut up a quantity into short pieces, having three or four buds in each, cutting straight through close under a joint; these were inserted firm in pots of fine yellow pit-sand, and were plunged in a hot-bed frame, where had been a crop of melons. By the early part of October I found nearly every cutting had rooted; and now I have plants enough to serve a nurseryman. This lovely flowering plant deserves to be grown wherever it can. A CURATE.

ON BOUVARDIA TRIPHYLLA.—This very interesting scarlet trumpet honeysuckle like beautiful flower, becomes one of the prettiest objects grown in the greenhouse, when trained up to a single stem, and a head is formed similar to a dwarf standard Rose. So treated, it blooms most profusely, and the numerous heads of fine scarlet flowers, slightly drooping, and in bloom from May to November, renders the plant one of the most ornamental, and deserving a place in every greenhouse. The same method of treatment is equally successful with B. Jacquinii, B. versicolor, &c. CONDUCTOR.

## FLORICULTURAL CALENDAR FOR MARCH.

AMARYLLISES, and other liliaceous bulbous plants which have been kept dormant, may now be re-potted, and put into an increased temperature.

ANNUALS, HARDY, such as Clarkias, Nemophilas, Larkspurs, &c.—If the soil be moderately dry, some of the most hardy kinds, to bloom early in the summer, may be sown in warm parts of the country, or situations well protected, but in cold places not until the end of the month; for if the seeds of many sorts begin to vegetate, and frost operate upon them, they are often destroyed. The best method of sowing the small seeds in patches is to have a quantity of finely sifted soil; spread a portion where desired; after scattering the seed, sprinkle a little more soil over them, and then press it closely upon the seeds, which will assist them in vegetating properly.

ANNUALS, TENDER, such as Cockscombs, Balsams, Stocks, &c.—Such as have been sown, and may be up, should have all possible air given to prevent their being drawn up weakly. In watering those in pots they must not be watered over the tops, or many of the sorts will be rotted by it. The best method is to flood over the surface of each pot, always using water that is new-milk warm. Those annuals sown in frames must be watered (when requisite) with a very fine syringe, or pan-rose to sprinkle with; but the best plan is to take advantage of gentle rains. For any seeds yet requiring to be sown, use fine soil pressed to the seeds; and, when convenient, place the pots (if used) in moist heat till the plants are up. Cockscombs, Amaranthus, Balsam, Browallia, Brachycoma, Thunbergias, Maurandias, &c., if large enough to pot, should be done in sixty-sized pots.

AURICULAS.—Those requiring top-dressing should be done immediately, by taking off about two inches deep of the top-soil, replacing it with some very rich; more than one-half of it should be rotten cow-dung two years old, and the rest loam and sand. Immediately after this dressing, let the soil be well settled by a free watering. By the end of the month the unexpended blossoms will be nearly full grown; no water must be allowed to fall on them, or the blossoms would be liable to suffer injury by it. All possible air may be admitted to the plants during the day, only screen from cutting frosty winds.

CAMPANULA PYRAMIDALIS—to have fine pot specimens, should be potted, if not before done, and encouraged to grow.

Carnations—at the end of the month, the last year's layers kept in pots or beds during the winter should be planted off into large pots 12 inches wide at the top, 6 at the bottom, and 10 deep. In each pot three plants may be placed triangularly, not planting deeper than to fix them securely. The following compost is most suitable:—Two barrows full of fresh yellow loam, three of well-rotted horse-dung, and half a barrowful of river-sand, well mixed; plant in it *without sifting*, but breaking very well with the spade, and have a free drainage of rough turf, &c.; place the plants in a sheltered situation out of doors.

Creepers—and twining greenhouse or hardy plants, should be pruned and regulated before they begin to grow.

Calceolaria Seed—should be sown early in the month, having the finest sifted soil for the surface.

Chrysanthemums—sow seed of, and raise in moist heat. Mind the suckers of old plants are not drawn up; admit duly of air.

Commellina tubers and Tigridia bulbs should now be planted.

Cuttings of Talvias, Fuchsias, Heliotropes, Geraniums, Celsias, Alonsoas, Lotuses, Senecios, &c., where it is desired to plant such out in beds, should be struck in moist heat as early as possible. Young shoots, cut off clean, strike readily. (See kinds of plants suitable, in vol. i., p. 38; and for additional kinds, subsequent vols)

Dahlias—if not already put into excitement, should be done as early as possible. Seeds should also be sown, placing them in a hot-bed frame till up. Cuttings be taken off and struck in heat.

Achimenes, Gesneria, Gloxinia, and Tropæolum bulbs, &c., that have been kept dry during winter, should now be potted, and gently brought forward in heat.

Herbaceous perennials, biennials, &c., should now be divided, if required.

Pelargoniums.—Cuttings now put in, struck in a hot-bed frame, and potted off as soon as they have taken root, will bloom during autumn.

Polyanthuses—should now be top-dressed, as directed for Auriculas, only the soil need not be so rich. Seed may now be sown; the best method is to raise it in heat, harden gradually, and transplant when large enough.

Ranunculuses and Anemones—should now be planted, taking care no fresh applied dung is in the soil, nor should the ground to plant in be lightened up more than two inches deep. The soil of the bed should be half a yard deep at the least. The best roots for flowering are such as have the crowns high and firm, with regular placed claws. Another bed, planted a fortnight later, brings them into bloom, so as to assist a florist to select for a show.

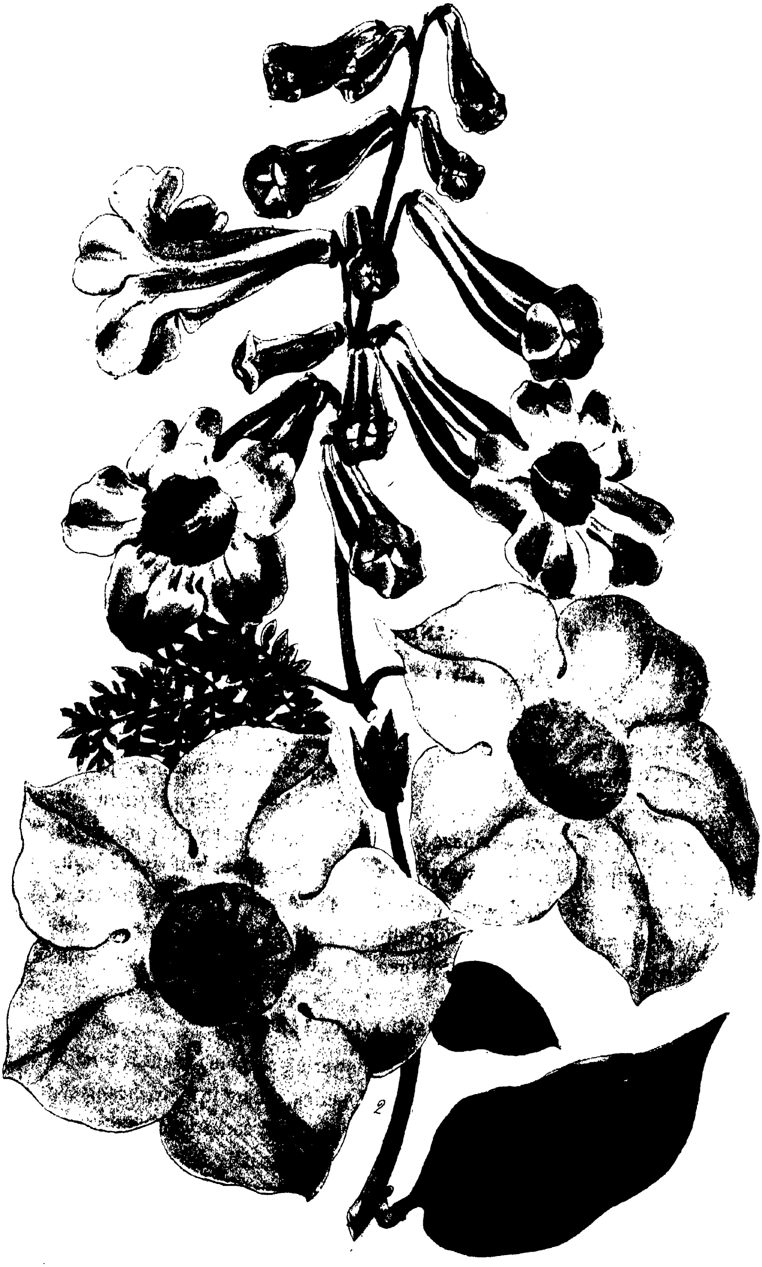
Rose Trees—not yet pruned, if allowed to remain untouched till the shoots of the present coming season be about an inch long, and be then shortened by cutting back all the old wood to below where the new shoots had pushed, the dormant buds will then be excited, and roses will be produced some weeks later than if pruned at a much earlier season. Plants in pots now put into heat will come into bloom in May.

Rose Trees, Lilacs, Pinks, Hyacinths, Narcissuses, Honeysuckles, Primroses, Double Furze, Dwarf Almonds, Rhodoras, Persian Irises, Sweet Violets, Cinerarias, Azaleas, Hepaticas, Lily of the Valley, Jasmines, &c., should still be brought in for forcing.

Tubberoses—should be planted, one root in a small pot, using very rich sandy soil; the pots should be placed in moist heat till the plants are up a few inches; then they may be planted into larger pots, and taken into a stove, and finally into a greenhouse.

Tulips.—At this season, such as happen to be affected with canker will appear sickly; the roots should be examined, and the damaged part be cut clean out. If left exposed to sun and air, the parts will soon dry and heal. Avoid frosty air getting to the wound by exposure.

Seeds—of greenhouse and similar plants may now successfully be sown, raised in moist temperature.



1. Jacaranda Mimosifolia. 2. Allamanda Cathartica.

THE

FLORICULTURAL CABINET,

APRIL 1st, 1845.

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# PART I.

## EMBELLISHMENTS.

## ARTICLE I.

### 1. JACARANDA MIMOSAFOLIA.

This very interesting and beautiful flowering plant is a native of Brazil, and requires to be grown, in this country, in a warm conservatory, greenhouse, or moderate plant stove. It requires to have a gentle bottom heat to push its flowers vigorously, so that being placed over, or near, to a flue is necessary, if there be no other provision. It must have a *liberal* drainage, and to be grown in equal portions of rich turfy loam and turfy sandy peat. Plants about half a yard high, bloom very freely, and with the fine panicles of flowers produce a very showy appearance, especially interesting, too, in contrast with the beautiful Mimosa-like foliage. It may be had cheap at the public nurseries.

### 2. ALLAMANDA CATHARTICA.

This very beautiful and profuse flowering climbing plant is a native of Cayenne and Guiana in South America, where it flourishes in the neighbourhood of rivers. It requires a *warm* conservatory or greenhouse, not of less temperature than what is usually termed half-stove. In such a situation we have seen it flourish and bloom very freely. It is a handsome looking plant, the leaves being large, of a dark glossy-green, and evergreen. It is of vigorous growth, and yet very readily kept in proper bounds. The flowers are produced in clusters at the sides of the shoots, they are exceedingly showy, generally each blossom is near double the size of those in our present plate, as we were obliged to reduce the size in order to conform to the usual extent. It thrives best when turned out in the open border, or pit, elevated above the floor of the house, so the sides may be warmed by the heated air. A free drainage of about a foot deep is essential, so that the plant may never be drenched at the roots.

In a rich turfy loam and turfy peat chopped, not sifted, with some pieces of charcoal sprinkled among, it grows luxuriantly.

It is easily increased by cuttings of the young shoots. The plant can be had at the nurseries at about half-a-crown each, and it well merits a place wherever a fine showy climber is desired. It blooms nearly all the season, from May to November.

## ARTICLE II.

### REMARKS ON PLANTING FLOWERS IN MASSES,

BY FLORA.

Much has been said in commendation of the modern fashion of planting the flower-clumps of the garden and pleasure ground with but one kind of flower. The effect, in my opinion, is almost always bad; there is as much glare and want of relief in a great bed of Roses, Geraniums, Irises, &c., as in the old plan of indiscriminate mixture of small patches of many species, and with less variety. A collection of mere Roses is doubtless highly interesting when judiciousl arranged by a mixture of tall and low growing species of various tints of colour, and the whole set off by the dark green of trees and shrubs in the back ground, and which I had the high gratification of seeing in full splendour in July last; but a clump solely of the China, or any other kind of Rose, as is often seen in the midst of a grass plot, seems to me as glaring as would be a nosegay wholly of Roses; and, in the case of Irises, &c., there is the further great objection, that a week's display in spring is purchased with months of subsequent barrenness and deformity. Two points seem clearly required in a flower-clump; first, that it should present a succession of flowers; and, secondly, that these should be contrasted and relieved by a due intermixture of green, just as the native taste of the veriest peasant tells him is requisite in the bouquet which he offers his mistress. On this principle were formed the flower-clumps in the pleasure-grounds which I saw last June, and the beautiful effect of which it was impossible not to admire. The centre of each was occupied by tall-growing plants, not yet in flower, and other portions of the surface by smaller ones; and between these were planted double stocks, purple, scarlet, and white, in considerable masses of each colour, and other flowers (of which I forget the sorts) of higher growth above them, and of lower growth beneath them, all in pretty large patches of each, the whole being set off in tenfold beauty by the happy intermixture, in every part, of the green leaves of the plants which were next to flower.

To obviate the bad effects of decayed flowers, perhaps the best plan of ornamental flower-clumps, where expense is not regarded, would be to have them partly planted with evergreens of low growth, or kept low by pruning; and, between these, to transfer from the pots in which they had been raised the finest flowers of each season, just taken on the point of flowering, in sufficient masses of each colour, and to be removed and replaced with others as soon as they had done flowering, so as always to have a new and brilliant display at all periods of the year, and at the same time a due contrast of a more sober colour from the intermixed evergreens.

In the new plan of planting flowers as of shrubs, the professed object is a more close imitation of nature; but it may be doubted whether the object is better attained in one case than the other. It is true that we more frequently see wild flowers growing in masses than singly; but these masses are seldom large, and are almost constantly more or less intermixed with or skirted by other plants. Take, for example, the common starwort (Stellaria Holostea), which is so great an ornament of our hedge-banks in spring. The tufts in which it grows rarely exceed a square foot or two in extent, and have almost always a border of Lychnis, Erysimum, or other plants with abundant foliage, besides the shrubs of the hedge and bank as a background, to contrast with and set off the beauties of its flowers, which, thus half displayed, it will scarcely be denied are far more attractive than if crowded into one large staring mass, in a single bed, as in the modern fashion. In like manner, how rarely do we see the foxglove, when adorning our heaths in its utmost profusion, collected into large unvaried masses; and, if such accidentally occur, though we may for a moment be attracted by their brilliant singularity, it is not on them that the eye delights to dwell, but on the smaller groups of various heights, half concealed by the ferns or brambles from amidst which they spring, and which, like the frame of a picture, enhance their natural beauty. Where the beds of one sort are small, and others near them, then variety in colour, duration, &c., may be better effected and not so liable to the objections which glaringly apply to large ones in every instance. Beds so formed as to be divided into compartments, or strips, planted with several kinds, also form beds which are less objectionable.

## ARTICLE III.

### ON PENTAS CARNEA,

BY AN AMATEUR PLANT GROWER.

A RECENT number of the FLORICULTURAL CABINET contained a figure of the new and delicately beautiful Pentas carnea. One of the specimens exhibited at Chiswick, and far the best there, was mine; and by the following mode of treatment had been produced so handsome a specimen.

I had the plant in a sixty-sized pot in January last, and, having a moist plant-stove, I placed it there, repotting it in a twenty-four, well drained, in a mixture of loam and peat, with half a pint of bits of charcoal intermixed. In this it grew rapidly, and in March I repotted into a twelve, in similar compost; the plant had then grown to two feet high. I pinched off the lead of the upright stem, which caused the production of lateral shoots, which in due course grew vigorously. The flowers being produced in terminal heads, each lateral branch produced a corymb of flowers, and the result was twelve fine heads of bloom.

Although the plant will do tolerably well in a warm greenhouse, it does much better in a plant-stove. It might be forwarded so as to form its heads of bloom in a hotbed frame, vinery, &c., and then be removed to bloom in the greenhouse or conservatory, and succeed to satisfaction. Its beautifully delicate flowers, produced numerously, and for so lengthened a period, renders the plant worth any attention being paid to it.

# ARTICLE IV.

## ON BOUVARDIAS FOR BEDS,

BY AMICUS.

IN a former volume of the CABINET, I saw the remarks on this beautiful tribe of trumpet flowering plants, and that they readily increased by the roots being cut up into lengths of two inches each, struck in heat, potted off singly into small pots, and, towards the end of May, planted out in the open flower-beds, in a soil of equal parts of sandy peat, loam, and leaf-mould, and that they would form a beautiful bed of lovely flowers. I followed the plan, but found the plants rather weakly to produce a vigorous bloom. At the end of the season, before severe frost, I took them up with as much soil adhering as I could, placed them erect, as close as possible, in an old mignonette-box, watered them immediately, and placed the box under the stage in the greenhouse, letting it be nearly dry through winter. Early in March I took the box and placed it where it had more light, and watered the plants. They soon began to grow, and about the middle of May I planted them out in the beds, and the show was splendid, a mass of Trumpet Honeysuckle-like flowers adorning the bed from the middle of June to the end of October. When I took the plants out of the box, in May, I cut away straggling roots, and potted them in lengths for an increase of stock. A bed of these neat and beautiful flowering plants, from a foot to half a yard, is one of the prettiest ornaments in a flower-garden.

# ARTICLE V.

## REMARKS ON POTTING PLANTS,

BY AN ARDENT AMATEUR FLORIST.

IT is well known, by all plant growers, that there are tribes which require a very different soil from others, some flourishing in loam or sandy loam, and of a similar nature; whilst others require bog peat, sandy peat, &c. To particularise what kind of soil would suit best is not in my power, nor could space be allowed in the magazine.

There is, however a general knowledge now abroad, as to what habit the plant is of, and which suggests the nature of the soil most likely to suit.

The general skill of the nurserymen and gardeners of the present age, in plant growing, is such that it is soon ascertained what suits best; and purchasers of plants, observing in what kind of compost they are in, will discover what will usually be a guide for future, as it relates to its nature. What I am desirous to make some remarks on, in this place, is the condition in which the soil, &c., should be when used for potting the plants in.

The first attention is required to have a suitable-sized pot. For those plants whose roots proceed rapidly, as vigorous-growing plants, a larger pot may be used at once; but where the fibrous roots are few, or very delicate, one of proportionate less dimensions.

A free drainage of broken pots, Sphagnum moss, chopped turf, &c., to a good depth, is an essential thing to success; for, if water is not allowed to pass off with freedom, the soil at the lower part of the ball soon becomes soddened and sour, and each application of water afterwards only tends to promote the saturation of a layer higher up the ball, and increase the evil; and thus preventing the water filtering away hastens on the death of the plant.

The compost itself, too, should be of an open texture, so that not only the water may freely filter through, but to admit air in a due degree to pervade amongst the roots in an equal degree in every part, and this latter is a most essential thing to fertility. When the ball of compost becomes of a close texture, and allowed to dry, it bakes so hard as thus to prevent a regular diffusion of moisture or air; and if kept saturated, becomes of so close a texture as to be equally injurious.

The application of bits of charcoal scattered amongst the soil I find very beneficial; it not only tends to keep the soil open, but at the same time absorbs moisture and retains a degree thereof which contributes to supply sustenance when the soil even becomes somewhat dry. So, in some degree, I find broken bits of porous stone, or potsherds, beneficial when scattered in a moderate degree.

The surface of the ball should be carefully attended to, especially in the case of delicate plants, to have it kept so even as that the water given may descend as regularly as desired in every part. When (as it is liable thereto) the application of water is given so that a hollow around the stem of a delicate plant is formed, and a continuous supply is poured in and sinks mostly there, the death of the plant is soon the result; and, on the other hand, when the water only sinks at the sides of the pot, then the interior of the ball becomes so dry as not to be able to sustain whatever fibrous roots may be therein. From these observations it will be perceived that attention to the surface of the compost is necessary. Without attention to the above-named principles, in application to plant culture, when grown in pots, plants will not long be in a healthy condition; but if duly attended to, with all plants of the class this mode of culture applies to (as I exempt many of the orchideæ, water plants, &c.), they will be uniformly vigorous and healthy; and, being repotted as required, may uniformly be kept so.

## ARTICLE VI.

### ON THE CULTURE OF LUCULIA GRATISSIMA,

BY CLERICUS.

A CORRESPONDENT writes, in the "Gardeners' Chronicle," on Luculia gratissima, that although it has been in this country for a number of years, still its cultivation is but in its infancy, both as to extent and mode of culture, in order to have it in the splendour it can be brought to. It has been considered a beautiful specimen to grow it so as to have half a dozen heads of blossoms to a plant, but that those eminent plant growers, Mr. J. Barnes, of Lady Rolle's, at Bicton, and Mr. William Barnes, of Shropshire, grow it with from 50 to 100 heads, as large as Hydrangeas, on each plant. The compost the writer mentions he uses is four parts turfy loam, two parts turfy peat, two parts half-decomposed leaf-mould, one part charcoal broken to the size of garden beans, using the dust as well, with sufficient Barwell sand, broken potsherds, and flinty pebbles, to make and keep the soil thoroughly porous, using it in as rough a state as possible, in which the plants grow vigorously. It is not, however, when in such vigorous growth that the plants produce the greatest quantity of bloom, but it is when they produce a great quantity of moderate-sized branches that they become so beautifully studded with flowers, and that an old stump plant will continue to produce abundance of flowers for years, and requires little more attention than a common Pelargonium. Young plants, on becoming half a yard high, have the lead stopped to induce the production of lateral shoots. The plants are encouraged by applying liquid manure water occasionally, repotting, &c. It is not advisable to stop the plant later than the middle of July, or the lateral shoots will scarcely be firm enough to endure the effect of winter. Plants to bloom are placed out of doors in August, and kept there till October, giving them shelter only when nights were cold or the day stormy. From the middle of October to the close of November they were kept in the greenhouse, then removed to a house kept at from 45 to 60 degrees, and early in December they show for bloom, and by Christmas be in splendour, and so continue for a long period.

In order to have dwarf plants, the same mode of treatment as the Hydrangea often receives may be successfully pursued; viz., after the flower-buds are formed they may be cut off and be potted singly, plunging them into a good bottom heat; they soon strike root, and bloom when the plants are not more than six inches high. The plant ought never to be checked when in a growing state. It is so beautiful, noble flowering, and deliciously fragrant, that it is worth growing in every warm greenhouse or conservatory.

## ARTICLE VII.

### ON THE PARTS OF A FLOWER NECESSARY FOR THE PRODUCTION OF PERFECT SEEDS.

HAVING lately noticed with pleasure the encouragement you give to promote the production of hybrid plants, and that, in consequence of your remarks, correspondents who are desirous of pursuing it, but are ignorant of the process requisite to success, have sent queries on the subject, I am therefore induced to forward the following descriptive particulars of the various parts of the flower for early insertion in the CABINET.

A flower is divisible into seven parts; viz., the calyx, or flower-cup; the corolla, or blossom; the stamina, or male organs; the pistillum, or pointal; the pericarpium, or seed-vessel; the semen, or seed; and the receptaculum, or receptacle. These parts admit of several divisions, which will now be concisely described.

Calyx (from Καλυξ, kalux, the case of a flower).—The flower-cup is that external covering, usually of a greenish colour, which invests and protects the coloured floral leaves, or corolla, where that is present; or those principal and most important organs of fructification, the stamens and seed-vessel, where the corolla is wanting.

Corolla (from coronella, a little crown).—The corolla is that part of the fructification which is universally admired on account of the beautiful colours it displays and the fragrance it exhales. Like the calyx, the corolla is not absolutely essential to the perfecting of the fruit.

Stamina (from στάμων, stamon, yarn or spun wool; a term intended, most likely, to express the capillary, hair-like, or woolly appearance of this part of the flower; or it may be derived from Σταμινες, stamines, erect pieces of wood).—The stamens, formerly called the chives, vary in number, in different flowers, from one to some hundreds. Their situation is internal with respect to the parts we have been describing; external to the pistils, at least in simple flowers; and so it is in compound flowers of the class syngenesia, inasmuch as concerns the florets of the disk (that part which is commonly of a yellow colour, as in daisy, camomile, &c.), each separable portion of which is a true and perfect flower, consisting of a tubular corolla, divided at the top into five segments, five stamina, a pistillum, and a perfect seed; unless where nature sports, and changes the fertilizing organs into strap-shaped petals, in which case the flower becomes double and barren.

The stamina are essential, there being no plant hitherto discovered, after the most careful research, that is destitute of them, either in the same flower with the pistils, or in a separate one of the same species. A stamen commonly consists of two parts, the filament, *filamentum*, and anther, *anthera*, the former being merely what supports the latter, which is the only essential part. The filaments are threads, those taper bodies which usually are immediately within the flower-leaves. These threads support the antheræ (tips or summits), the only essential parts of a stamen; they are generally of a membranous texture, consisting of two cells or cavities, bursting longitudinally at their outer edges, as in the tulip, and then becoming so changed in figure as scarcely to be recognised for the same plump and well-defined bodies which formed the summit of the stamina.

The *pollen*, farina or dust (from *pello*, to drive away), is contained in the anther, from which it is thrown out chiefly in warm dry weather, when the coat of the latter contracts and bursts. The pollen, though to the naked eye a fine powder, and light enough to be wafted along by the air, is so curiously formed, and so various in different plants, as to be an interesting and popular object for the microscope. Each grain of it is commonly a membranous bag, round or angular, rough or smooth, which remaining entire till it meets with any moisture (being contrary, in this respect, to the anther), then it bursts with great force. discharging a most subtle vapour.

It is said that the pollen contains hydrogen gas; and, being thus rendered specifically lighter than atmospheric air, it floats therein till it lights on the medium which it is prepared to impregnate. If this be the fact, it will be interesting to investigate it as a phenomenon of attraction, and subject to the influence of that law by which bodies in opposite states of electricity tend to form a union one with the other. In this view of the subject, the pollen, it is probable, will never explode, and, consequently, will fail to impregnate the organs of any germen which does not attract it by the agency of a gas or fluid in a specifically opposite state of electricity. But should the dust approach an organ possessing and exerting such a specific energy on the gas contained in the membranous bag, it will burst, and produce a new arrangement of the chemical elements of the embryo seed in the germen. The gaseous theory will throw some light upon the phenomenon of the mixtures and crossings which take place in the cabbage tribe, and among individuals of congenerous species; and, by assuming that specific attractions must take place before any impregnation can be effected, it will evince the utter impossibility of a general and promiscuous fertilisation, which, were it not provided against, would produce the utmost confusion among the genera and species of plants. The theory and the fact bear out each other, and daily experience proves that which the hypothesis presumes.

Pistilla (from *pistillum*, a pestle, from the resemblance, doubtless, of the organ to that utensil).—The pistils, or pointals, are not less essential than the stamina; they stand in the centre of the flower, and usually are fewer in number. Sometimes the pistil is not in the same flower as the stamens, and then it does not always occupy the centre of the flower. Every pistil consists of three parts; first, the germen—this is essential, as it is the rudiment or matrix of the seed or fruit; second, stylus, the style (from Στυος, *stulos*, a stalk, or sharp-pointed pencil). This part is sometimes wanting, it also varies exceedingly in length and thickness; it is a pillar or column to support the third part, or stigma (from Στιγμα, *stigma*, a mark or brand), the upper part or termination of the style; or, if that be absent, the crown of the germen. Its shape is various, either simple, scarcely more than a point; or capitate, forming a little round head; or variously lobed. Sometimes it is hollow and gaping, more especially when the flower is in its highest perfection; very generally downy, and always more or less moist, with a peculiar viscid fluid, which in some plants is so copious as to form a large drop, though never big enough to fall to the ground. The moisture is designed for the reception of the pollen, which explodes on meeting with it; and hence the seeds are rendered capable of ripening, which, though in many plants fully formed, they would not otherwise be.

Pericarpium (from περι, *peri*, round about; and καρπος, *karpos*, fruit).—The seed-vessel, an envelope or covering enclosing the seed; it is the impregnated germen enlarging or expanded to maturity. It is not essential, as in many flowers the seeds are naked, being simply protected by the calyx. Such is the case with the ringent flowers of the fourteenth class, Didynamia, and with many others. The use of the seed-vessel is to protect the seeds till ripe, and then, in some way or other, to promote their dispersion either by its elastic power, as in Yellow Balsam (*impatiens, noli me tangere*), or serving for the food of animals, in whose dung the seeds vegetate. This is said to be the fact with respect to that beautiful and odoriferous tree, Myrtus pimenta, or the true Allspice. The berries of this tree are devoured by birds, and thus are prepared for vegetation, which takes place rapidly after the seed has undergone this stimulating process.

## ARTICLE VIII.

### REMARKS ON THE TUBEROSE.

Polianthes is from the Greek, and signifies City-flower.—*French*, la tubéreuse; jacinthe des Indes (Indian hyacinth).—*Italian*, tuberoso; tubero Indiano (Indian bulb).

THE Tuberose grows naturally in India, whence it was first brought to Europe in 1524. In the warmer parts of the European continent it thrives as well as in its native soil. In Italy, Sicily, and Spain, the roots thrive and propagate without care where they are once planted. The Genoese cultivate it, and send the roots annually to

England, Holland, and Germany, where the climate is less congenial to it.

This plant has long been cultivated in English gardens for its extraordinary beauty and fragrance.

There are several varieties; one with double flowers, which was obtained from the seed by Monsieur Le Cour, of Leyden, in Holland, who for many years was so tenacious of the roots, even after he had propagated them in such plenty as to have more than he could plant, that he caused them to be cut in pieces, to have the vanity of boasting that he was the only person in Europe who possessed this flower.

Those roots are the best which are the largest and plumpest, provided they are sound and firm; and the fewer offsets they have, the stronger they will flower. The under parts of the root should be particularly examined, because it is there that they first decay, Before the roots are planted the offsets should be taken off, or they will draw a great deal of nourishment from the old root. They may be planted in April and May, but should be kept indoors, admitting fresh air in mild weather. Most persons raise these flowers in pots in a hot-bed, and, when the flower-stem is about six inches high, plant them out in the open ground in a warm situation; or repot entire, and place them in a greenhouse. It is essential to have them forced till the flower-stem is as high as above stated. They require a rich loamy soil, well drained, not sifted. They should be supported by stick as the flower-stems advance in height, and should have little or no water till they begin to shoot; when in flower they require plenty.

Flowers raised in this manner will blow about September and October, adorning and perfuming the apartment they are placed in in a very agreeable manner. When the roots are strong, they will often produce ten or twelve flowers, and the stem will rise three or four feet high. As the flowers come out in spikes, opening successively from the bottom to the top, they will, of course, continue longer in beauty in proportion to the number they produce. They may be placed in a balcony in summer weather, if desired; but the double-flowered variety must remain in the room: if these are placed at a little distance from a closed window on which the sun shines (yet the room being properly ventilated), they will open more fair than when too much exposed.

The Malayans style the Tuberose the Mistress of the Night:—

"The Tuberose, with her silvery light,
That in the gardens of Malay
Is called the Mistress of the Night,
So like a bride, scented and bright,
She comes out when the sun's away."

We are to remember here that the poet is speaking of the lady's habits when in her native country; in our colder climate she must wait for the sunshine.

When worn in the hair by a Malayan lady, it informs her lover that his suit is pleasing to her.

A friend has obliged me with a translation of a little poem by Madame Deshoulieres, who, he observes, appears, by another poem in her collection, to have been fond of the Tuberose:—

"Pride of gardens, charming flowers,
Fleeting as your little hours;
Often does a summer day
Give ye life and take away:
Mornings two or three at most
Are the brilliant life ye boast.
Ah! disturb not your reposes,
Gallant Jonquils, fair Tuberoses:
Short is your sweet life, 'tis true,
But 'tis full of pleasure too.
Jealousies and evil tongues
Do not hem ye round with wrongs;
All the world cares not a cipher
For the love 'twixt you and Zephyr;
Nor do over delicate
Feelings vex your happy state.
Nothing does it harm or grieve you
When the wanton zephyrs leave you—
Leave you to go sport elsewhere,
Laughing ever, here and there:
Nothing—nothing; nor are yours
Pangs that the slain heart endures,
When it sees the hand that slew it
Wanting e'en in pity to it.
You, when you would play the queen,
Need but dress ye, and be seen;
Happy flowers! and when you die,
'Tis but a dull day's good-bye:
Born again, you flaunt your span,
And mock the graves that close on man."

# ARTICLE IX.

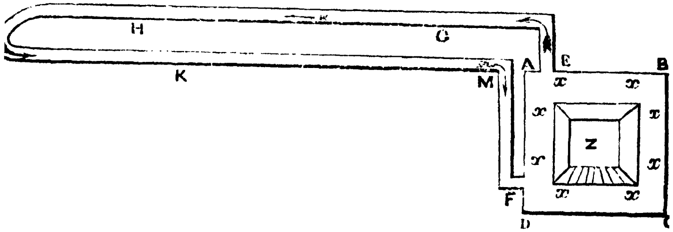
## ON HEATING GREENHOUSES BY MEANS OF HOT WATER, AS DESCRIBED BY C. C., OF SOMERSETSHIRE, Page 255.

BY A. B. C., OF CORNWALL.

C. C.'s observations on this head appear to me to contain exactly the quantity of information calculated to puzzle and mislead all who know nothing of this subject, without giving the slightest information to those who are at all acquainted with it. Having put up an apparatus myself last winter, which answers well. I send you the result of my experience, presuming, however, that I only offer it to those who are ignorant of the subject, as I was before I turned my attention to it.

In the first place, the thing cannot be done unless the principle is understood as well as the *modus operandi.* The principle is that there should be a constant circulation of the hot water, whether it flows through pipe or tank. The circulation keeps the temperature equal throughout the whole pipe, and therefore over the whole house, and unless this circulation is secured you may have one end of your house warm and the other freezing at the same time.

The mode of obtaining this circulation will be readily understood by a little attention to the following diagram and explanation.



Let A B C D represent the boiler; Z represent the fireplace; *x x x x* water all round the fireplace; E G H K M F the water-pipe, of which one end at E enters the top of the boiler, the other end at F enters the boiler at or near the bottom. The water-pipe must be quite horizontal, the branch G H being on the same level as the branch K M, and the whole pipe being above the level of the boiler (except the small parts near the boiler, which descend to it). Now, supposing the fire to be lighted, the top part of the boiler is heated first, and the water there, being expanded by the steam, is forced up through the pipe at E, circulates in the direction of the arrows, entering the boiler again at F, and this circulation is constant as long as the water is heated, owing to the water at the top of the boiler being hotter than that at the bottom; and the expansion at the top constantly forces the water up through the pipe at E, because, in consequence of the whole pipe being at a higher level than the boiler, the boiler is always full, and the water has no other means of escape. It seems hardly necessary to urge that the pipe should be perfectly horizontal, it being generally admitted that water has no particular fancy for running up hill. It will be obvious enough that if the pipe is below the level of the top of the boiler, the boiler will not be always full; and if the top of the boiler is empty, there would be merely a steam pressure on it, which might induce a blow-up, and would never produce circulation. C. C.'s plan of placing the boiler in any convenient corner, and carrying the pipes along the floor, is well calculated to produce an explosion, since the whole of his pipe would be below the level of his boiler, and he would have no circulation at all. The water may circulate in a gutter made water-tight with Roman cement, and this is the cheapest plan, and answers well if the gutter be laid truly horizontally. The fireplace must have an air-tight door, and there must be a door to the ash-pit, with a regulating valve, or some similar contrivance, to admit more or less air, as required.

My object in giving a sketch of the boiler, as above, is, that it can be cast and fitted up at any foundry, as mine was, as it is not every person who can afford to pay 6*l*. 6*s*. for one of Stephenson's boilers, which, however, are excellently made. The whole of my apparatus, including boiler, forty-five feet of gas-pipe (three-inch diameter inside), and fitting and fixing, cost 10*l*. only. The boiler is sunk in the floor of my back kitchen, which adjoins the greenhouse. My fire will remain lighted for six hours without trouble, and frequently remains in for nine hours. The quantity of "culm" (query, anthricites?) used is quite insignificant, and culm gives far more heat and burns much longer than coke, and I could keep up a high temperature if I wished.

# PART II.

## LIST OF NEW AND RARE PLANTS.

**Angræcum distichum.** Two-rowed. (Bot. Mag. 4145.) Orchideæ. Gynandria Monandria. A native of Sierra Leone, introduced by Messrs. Loddiges, with whom, and in the Royal Gardens at Kew, it has bloomed. It is a slender growing plant, the stems being from three to five inches long. The blossoms are very small, white.

**Aotus gracillima.** Most Slender. (Bot. Mag. 4146.) Leguminosæ. Decandria Monogynia. Mr. James Drummond sent this very beautiful species from the Swan River to the Royal Gardens at Kew. It is a handsome, shrubby, greenhouse plant, somewhat like an Eutaxia densely in bloom. The flower spikes are eight inches, or more, long, forming a dense cylindrical mass of bloom, of a lively yellow spotted with red. It deserves a place in every greenhouse.

**Aphelandra aurantiaca.** Orange-flowered. (Bot. Reg. 12.) Acanthaceæ. Didynamia Angiospermia. Dr. Lindley supposes it to be a native of South America. It is a hothouse shrubby plant, of considerable beauty. The flowers are produced in terminal spikes of about six inches long, of a rich orange-red colour. It will be a fine companion plant with the Ixoras, Hindsias, &c., suited for an exhibition. It has bloomed in the nursery of Messrs. Henderson, Pine-Apple Place. It is a very desirable plant for a hothouse collection. Each blossom is about an inch across.

**Barbacenia purpurea.** Purple-flowered. (Pax. Mag. Bot.) Bromeliaceæ. Hexandria Monogynia. It is a native of Brazil, and was found by Mr. Gardner near Rio Janeiro, growing where a little vegetable mould had accumulated, and bloomed profusely. The flower-stems are rigid, extending near a foot long; the flowers are terminal. Each blossom is about two inches across, formed of six spreading petals, of a rich deep purple colour. It has bloomed in the noble collection at Wentworth House Gardens. It is a very interesting and pretty flowering plant.

**Calathea villosa.** Shaggy. (Bot. Reg. 14.) Marantaceæ. Monandria Monogynia. Messrs. Loddiges obtained this plant from Demerara. It is a stove-plant. The flowers are produced in spikes of about six inches long, of a bright yellow. Each blossom being about an inch and a half across.

**Eustoma exaltatum.** Tall. (Bot. Reg. 13.) Gentianaceæ. Pentandria Monogynia. (Synonyms. Lisianthus exaltatus, L. glaucifolius, Eustoma silenifolium, Urananthus glaucifolius.) It is a warm greenhouse annual plant, from the warm parts of Mexico, and various places in North America. The celebrity of Lisianthus Russellianus has brought this plant now into celebrity. Its foliage is neat, rather narrower than the plant just named. In order to render it bushy, the leads of the shoots must be stopped so frequent as to induce a sufficient production of laterals. The flowers are of a purplish blue, with a dark fine spotted eye surrounded with white. Each blossom is near two inches across. It is well worth a place in the greenhouse, and may be had at the public nurseries.

**Myoporum Serrattum.** Saw-leaved. (Bot. Reg. 15.) Myoporaceæ. Tetrandria Monogynia. A very pretty greenhouse shrub, a native of South Australia. It is in the collection of the London Horticultural Society, and bloomed in their garden last season. The flowers are white, spotted with purple, borne in vast profusion, and are succeeded by blue fruit. It is a very deserving inmate for the greenhouse.

**Lycium fuchsioides.** Fuchsia-flowered. (Bot. Mag. 4149.) Solaneæ. Pentandria Monogynia. A native of South America, and sent by Dr. Jameson to the Royal Botanic Gardens at Kew, where it has bloomed. It is a smooth shrubby plant of three or four feet high, flowering very freely. The blossoms are produced in some cases by twos, and in others from that number to ten in an aggregate cluster. Each blossom is about an inch and a half long, tube shaped, with a spreading limb, something like a Scarlet Trumpet Honeysuckle in form and colour. It is a very handsome flowering plant, well deserving a place in every greenhouse.

**Oncidium bicallosum. Two-warted.** (Bot. Mag. 4148.) Orchideæ. Gynandria Monandria. Sent by Mr. Skinner from Guatemala to the collection at Woburn Abbey Gardens, and to Mr. Bateman at Knippersley in Cheshire. The flowers are yellow, slightly tinged with green on the sepals and petals; they are produced freely in large panicles. Each blossom is near two inches across.

**Phædranassa chloracra. Crimson and Green blossomed.** (Bot. Reg. 17.) Amaryllidaceæ. Hexandria Monogynia. From Peru, a greenhouse bulbous plant, which is bloomed at Bury-hill Gardens, near Dorking, in Surrey. The flower-stem rises about two feet high, terminating in an umbel of many drooping flowers. Each blossom is about two inches and a half long, the tubular portion being of a bright crimson colour, and about half an inch of the end a deep green. The contrast is striking, and the plant well deserves a place in every greenhouse bulbous collection.

**Ruellia lilacina. Lilac-flowered.** (Bot. Mag. 4147.) Acanthaceæ. Didynamia Angiospermia. It is a hothouse shrubby plant, which has bloomed in the collection at the Royal Botanic Gardens of Kew. Mr. Glendinning had sent it there. The plant grows about two feet high, branching, smooth. The flowers proceed from the axils of the leaves in pairs. The tubular portion is about an inch and a half long, almost white at the lower part, but above lilac with red veins. The limb (mouth) is spreading, of five rounded, nearly equal, lobes, of a pretty lilac purple, with red veins, and, when expanded, is about an inch across. It blooms the greater part of summer, and well merits a place in the stove.

**Salvia azurea. Azure-blue flowering Sage.** (Pax. Mag. Bot.) Labiatæ. Diandria Monogynia. It is a tall-growing herbaceous plant, smooth, producing its blossoms in racemes about four inches long. There are six blossoms in each whorl. A separate flower is about an inch long. The lip has a purple tinge upon the blue; but the rest portion is a fine azure blue. The leaves are long, and a narrow lanceolate form.

**Styphelia tubiflora. Tube-flowered.** (Pax. Mag. Bot.) Epacrideæ. Pentandria Monogynia. This very beautiful plant is a native of South Australia, and, although it has been introduced some years into this country, it is not generally known, by no means as it merits, when it is grown as it ought and can be, and thus be rendered an object of much beauty. It blooms, too, in the greenhouse at a desirable season for ornament, viz., during the winter and early spring months. It is an evergreen, Epacris-looking plant, producing numerous tubular blossoms all along the shoots of the previous season. They are handsome, pendulous, an inch and a half long, of a rich rosy-crimson colour. It can be had at the nurseries at a very cheap rate, and deserves to be in every greenhouse. In order to have the plant bushy, the ends of the shoots require to be pinched off to induce laterals. A turfy sandy peat soil, and a very liberal drainage, are essential to grow it in.

## New Plants noticed in Botanical Register, not figured.

**Lobelia Texensis.**—A Mexican species, of the class of L. fulgens, cardinalis, &c. The flowers are of a rich dark-purple colour. It appears not yet to be in this country.

**Maxillaria Lyonii.**—A native of Mexico; it has grass-looking leaves. The flowers are of a purplish-brown, edged with yellow.

**Helcia sanguinolenta.**—An orchidaceous plant, in the way of a Vandeæ. Sepals and petals olive coloured, spotted with brownish red. Labellum white, striped with blood colour, and streaks of yellow near the point. It has been sent by Mr. Hartweg to the London Horticultural Society, and is in the collection at Chiswick.

**Gesnera vestita.**—A shrubby species, seeds of which Mr. Hartweg sent from Bogota. The flowers are orange, mottled at the end.

**Brownea Ariza.**—Like Brownea grandiceps, but has larger flowers, being near six inches across. In the province of Bogota it grows in the woods from 30 to 40 feet high.

**Hybanthera cordifolia.**—A twining herbaceous greenhouse plant. It had been received at Berlin under the name of Echites sinensis. The flowers are of a greenish yellow, about an inch across, produced in umbels.]

### New Plants recently seen in Nurseries, &c.

**Beaufortia splendens.**—A greenhouse shrub of considerable beauty. The flowers are much in the form of B. decussata; they are, however, of a purple crimson, but in this new species are of a splendid scarlet. It is the profusion of long coloured stamens that form what is termed the flowers. It blooms during the winter months, and well merits a place in the greenhouse. It is in Mr. Knight's Nursery at King's-road, Chelsea.

**Physianthus auricomis.**—A climbing hothouse plant, much like Stephanotus floribundus, of a beautiful white, and fragrant. They are produced in large clusters, profusely, during the entire autumn months. It bloomed in Mr. Knight's nursery last autumn.

**Rondoletia speciosa major.**—This is a fine autumn and winter flowering plant. The flowers are larger than the original species, and of a brighter colour. It well deserves a place in every plant-stove or warm greenhouse. It has been in bloom at Messrs. Henderson's, Pine-Apple Nursery, London.

# PART III.

## MISCELLANEOUS INTELLIGENCE.

### QUERIES.

**On increasing Plants from Cuttings, &c.**—As an old subscriber to your Floricultural Cabinet, I should fee much obliged by your informing me, in your next number, of the best method to be adopted for striking cuttings, and their propagation. Having been at considerable expense in erecting a greenhouse, I am desirous of extending my collection of greenhouse plants, such as Geraniums, Fuchsias, Calceolarias, Cinerarias, and others. I have recently seen in one of your numbers charcoal recommended. I have tried it, and found it does not answer. By answering the above, giving a description of the soils most suitable for striking, you will much oblige me and other admirers of Nature's beauties.

Boltonlee Moor. Thos. Kerrison.

[Generally speaking, all soft-wooded plants, as Pelargoniums, &c., strike root readily; hard-wooded, such as Epacris, Heaths, Eutaxias, Chorozemas, &c., are more difficult, but by a particular attention in the process of preparation, and subsequent treatment, all may be accomplished with facility. Cuttings from soft-wooded plants may be made by cutting through horizontally close under a bud, and such will usually succeed. Cuttings from the hard-wooded class succeed the best when they are selected from the side shoots, cutting them off at their origin, when they are about half ripened. The part to be inserted in soil, &c., must be divested of leaves, by means of a sharp knife, and the more delicate (as Heaths) by means of a sharp razor. Sandy loam, or sandy loam and peat, will be suitable for soft-wooded plants, and, for the other class, what is called the white sand is best, the pot to be filled up with loam and peat, or entire sandy peat, nearly as high as where the bottoms of the cuttings, when inserted, come to, but insert them in the sand only. In fixing the cuttings therein, always have it pressed closely round the stem, but be careful not to bruise it. Bell glasses are essential in the hard-wooded class. Gentle bottom heat is necessary. A moist atmosphere, but not so extreme as to rot, is indispensable to success, the cutting being for a season dependent for support on absorption from the atmosphere, &c. We cannot here go into a longer detail, but enough is said for general purposes. An Article of all the minutiæ shall be given in our next number.—CONDUCTOR.]

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ON PREVENTING THE GROWTH OF WEEDS AND MOSS ON WALKS.—I should feel much obliged if you could inform me, through the FLORICULTURAL CABINET, whether anything can be done to prevent the growth of weeds and moss on gravel walks. I am now having some new ones formed, and am therefore anxious to know. AN OLD SUBSCRIBER.

[Unless the inclination of the ground be sufficient to allow the water to pass off freely, a drain along the middle of the walk, and the substratum surface sloping from each side of the walk to the drain. Cover over the drain with large stones or brickbats, &c., then, next, rough stone, brick, or gravel, over them, free from any mixture of earth, &c. The surface of this constructed substratum in the walk, for the final gravel surface, must be filled up with a somewhat finer sort, till the surface gravel completes the whole, and even pebble gravel being that of the surface. This being well rolled, and kept firm and even, is easily kept free from moss. A good sprinkling with salt, or salt water, will readily destroy all that appears; or if the surface be occasionally scrubbed with a stiff besom, &c., it will loosen it, and then be swept away, &c. Weeds of any other class are easily destroyed by a strong application of salt. When the surface of a walk is composed of gravel, it may be readily turned over, and made even as before; this tends to its being kept free from the pest of weeds. Where there is not the advantage of gravel, we have used a covering of rough lime rubbish, four or six inches deep, in the substratum, rolling it even, and when wet beating it smooth; upon this we laid the surface coat of what we were necessitated to use, as sand, &c. The lime kept the surface dry, and in summer it usually destroyed, by the heat, any moss or weeds.—CONDUCTOR.]

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ON TROPÆOLUM PENTAPHYLLUM.—Will this handsome and profuse-blooming plant succeed if grown in the open air?

[Yes, perfectly well, if grown against a wall or trellis, in a warm situation, and it deserves to be grown wherever it can. We have seen it bearing thousands of blossoms trained to a trellis at the front of a dwelling-house.—CONDUCTOR.]

ON HEADING DOWN PETUNIAS IN AUTUMN.—A Subscriber would feel much obliged to the Conductor if he would inform her, through the medium of the FLORICULTURAL CABINET, whether Petunias should be cut down in the autumn after blooming. She had several grown to a great height; they were cut to within six or eight inches of the root, and now some of the plants appear in a dying state. They have been in a cold pit, or the greenhouse, all winter.

[When there are several young shoots near to the main stem, then the heads may be cut down as low as where the shoots proceed from, and being taken up with as much soil adhering to the roots as possible, potted, &c., they generally succeed. If they can be placed where there is a little warmth for two or three weeks, it contributes to an earlier establishment. The plants, when first potted, should be well watered at the root, but afterwards, till they have pushed fibrous roots, only as much as will just keep the soil moist. Water should, however, be syringed over the foliage two or three times a-day, to aid in sustaining the plant till the roots derive benefit from the soil, &c. When the heads of the plants grown in the open border are cut down, and there be no young shoots near the origin, they seldom survive winter. The following method we have pursued in some instances, and it has answered well. The number of old plants we require to furnish stock for the following year are headed down early in August. They push lateral shoots immediately, and when these are about three inches long, the plants are taken up as entire as possible, planted in pots or boxes, and they get well established before winter. Plants for this purpose are isolated ones; so that we have not to disturb the order of an entire bed. The best mode, however, is to have a few plants for stock (to supply the next year), grown in pots, and head them down about the middle of August; they then push freely, and furnish a quantity of young shoots to take off for striking the following spring.—CONDUCTOR.]

A LIST OF SPRING-FLOWERING HERBACEOUS PLANTS.—I shall be glad of a list of spring-flowering herbaceous plants, to bloom from March to May.

A SUBSCRIBER.

| | Ft. | |
|---|---|---|
| Phlox procumbens, rose . | ½ | A., May |
| —— setacea, flesh-lilac . | ½ | — — |
| —— subulata, flesh . . | ½ | — — |
| —— nivalis, white . . | ½ | — — |
| Arabis grandiflora, white | ½ | — — |
| —— —— var., purple . | ½ | — — |
| —— alpina, yellow and white . . . . . . | ½ | — — |
| Fumaria nobilis, lilac and yellow . . . . . . | 1 | May |
| —— tuberosa, purple . | ½ | A., M. |
| —— —— var., white . | ½ | — — |
| Alyssum saxitilis, yellow | 1 | — — |
| —— orientalis, yellow . | 1 | — — |
| Omphalodes vernus, blue | ½ | Mar., Ap. |
| —— sempervirens, blue . | 1 | A., M. |
| Symphytum sanguineum, red . . . . . . . | 1 | May |
| Pulmonaria grandiflora, pink . . . . . . | 1 | A., M. |
| —— virginica, blue . . | 1 | Mh., April |
| Iberis sempervirens, white | ½ | — — |
| Draba aizoides, yellow . | ½ | — — |
| —— brachystema, yellow | ½ | — — |
| —— stellata, yellow . . | ½ | — — |
| Veronica elegans, pink . | 1 | May |
| —— ruthenica, blue . . | 1 | — |
| —— serpylifolia, blue . | ½ | A., M. |
| —— dentata, blue . . | 1 | — — |
| Gentiana acaulis, blue . | ½ | Mh., M. |

| | Ft. | |
|---|---|---|
| Gentiana humilis, purple | ½ | A., M. |
| Œnothera speciosa, white | ½ | Mh., M. |
| —— Frazeri, yellow . | 1 | M. |
| —— rosea, rose . . . | 1 | — |
| Pentstemon gentianoides, purple . . . . . | 1½ | — |
| —— —— coccinea, scarlet . . . . . . . | | — |
| Anemone memorosa, double, white . . . . | 1 | A., M. |
| —— pulsatilla, purple . | | — — |
| —— vernalis, white . . | ½ | A. |
| Asperula odorata, white . | 1 | A., M. |
| Ranunculus montana, yellow . . . . . . . | 1 | M. |
| —— ——, white. . . | | — |
| Aquilegia Canadensis, red-orange . . . . . | 1½ | M. |
| —— grandiflora, blue . | 1 | — |
| Tussilago fragrans, white | ½ | A., M. |
| Saxifraga oppositifolia, rose . . . . . . | ¼ | M., A. |
| —— cordifolia, purple . | 1 | A., M. |
| —— crassifolia, rose. . | 1 | — — |
| —— elongata, white . | 1 | — — |
| —— geranioides, white . | | — — |
| —— umbrosa, rose and white . . . . . . | 1 | — — |
| Orotius vernus, blue . . | 1 | — — |

M. before A. signifies March; A., April; M. after A., May; M. alone means May. The height is in feet. To the above many others might be added, as the Double Daisies, Single and Double Wallflowers, all the varieties of Double Primroses Winter (so termed) Stocks; many bulbs, as Ornithogulums, Frittillarias, Turban Ranunculuses, Hyacinths, Narcissuses. Some of the Pæonies come in May; Hepaticas too, blue, rose, and white, &c. &c.—CONDUCTOR.]

ON THE TREATMENT OF THE POLYANTHUS DURING WINTER.—A fortnight since I took up my Polyanthuses from the north border, where they have stood since May, and, shaking off the earth and washing their roots, I repotted and placed them in a frame, where they will remain for flowering in the spring. This has been my mode of treatment for some years, but I have hitherto found them disposed to flower much earlier than I wished, and have been obliged to take off the first flower stems about January. I wish to know how Polyanthuses in pots ought to be treated during the winter. Should they be kept regularly damp, as I have hitherto kept them (indeed I have supplied them with plenty of water throughout the winter), or would a drier treatment be desirable? Some information on this would much oblige, H.

October, 1844.

P.S. I had a Chelone Barbata this summer, which threw up four principal flower stems, 5 feet 6 inches high, besides smaller ones, and I think it formed the most perfect specimen of what a flowering plant should be I ever saw. It had no protection whatever last winter.

## REMARKS.

Grafting Fuchsias.—Your readers may exercise their taste in combining very opposite groups of blossoms, if they take the present opportunity of grafting or inarching the strong young growing shoots of the Fuchsia. For this purpose a warm moist atmosphere is necessary. I find the readiest mode is to select two plants, and within three inches of the heads to cut away half the thickness of the shoots, extending about 1½ inch; the two mutilated heads are firmly bound with soft bass, and the intended scion is then nearly severed just below the junction; within three days the scion may be cut clean through, and no check to its growth will be perceived; the head of the stock is now removed, the scion takes the lead, surrounded by laterals of the other variety. The best stocks are the strong growing kinds, as Fulgens, Cormackii, &c.; this latter, in combination with Conspicua arborea, is very effective. B.

Best climbing Roses.—The following are among the best Roses for training, as they are rapid-growing, hardy, abundant bloomers:—Noisette Lamarque—flowers very large, white, double, and rather early; Noisette Jaune Desprez—flowers in large clusters, of a buff or nankeen colour, rather late in the season; Aimée Vibert—flowers in large clusters, of pure white, flowering during the autumn; Bougainville—flowers purplish lilac, rather small, very double, and in great abundance; Charles the Xth—flowers bright red, a free bloomer, rather small, and early; Madame D'Arblay—pale flesh, very double, and late; Ruga—pale blush, sweet-scented, free bloomer, and very rapid growing, early; Champneyana—a very desirable kind, with large clusters of nearly white flowers, late in the autumn, and of rapid growth; Marie Leonida, or Double Macartney—a beautiful large double white Rose, of rapid growth, flowering freely in the autumn; De Lisle—large pale blush with pink centre, and very double, rather early; Boursault—bright red, free bloomer, but only semi-double, early; Blairii—rosy lilac, very large, and a free bloomer, early. There is no Rose that blooms all the year round; the old China is the longest in flower. There are several semi-double Roses, which are well suited for covering rough trellises or walls, such as the Perthshire, Dundee Rambler, Lovely Rambler, and Roseangle Blush.

Rosa.

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On Japan Lilies.—Mr. Tillery, gardener to the Duke of Portland, writes, in the "Gardener's Journal," that last August he had a plant of L. lancifolium rubrum, having one flower; when the petals were just about to expand he opened them a little, in order to find the stigma, and then impregnated it with the pollen from L. punctatum, the result was a large pod of seed. He also impregnated others of the Japan kinds of Lilies with pollen from the common Tiger Lily, and had the like success. He sowed the seeds as soon as ripe, in pots, now placed in a cool frame and kept dry, purposing to start them in heat in February. No doubt the result will be the production of beautiful hybrid varieties, and probably of a hardier race too.

Luculia gratisima.—In the plant-house at the gardens of Lady Rolle, Bicton, Devon, there is a fine specimen of this noble plant, three years old, 8 feet high, and 16 in circumference, in profuse bloom, having 94 heads of flowers, the heads as large as those of the Hydrangea. The lovely sweet pink blossoms producing a delightful effect. The compost consists of one-third light turfy loam, one-third heath mould, one-eighth coarse charcoal, and one-eighth half-rotted leaves, mixed with a portion of coarse sand and rough flints. In this it grows like a vigorous willow. A. Z.

[The plant ought to be grown in every conservatory and greenhouse, where practicable, it is so beautiful an ornament through winter.—CONDUCTOR.]

## LONDON HORTICULTURAL SOCIETY MEETING,

### Regent-street, March 18.

Notwithstanding the severity of the weather several fine things were produced. Mr. Robertson, gardener to Mrs. Lawrence, sent handsome specimens of Phaius Wallichii, and Dendrobium Pierardi, whose gracefully pendent branches were closely covered with pale lilac blossoms; several plants of Hippeastrum, nearly related to H. aulicum; and two most beautiful small specimens of the variety of Azalea indica, called Smithii coccinea, covered with bloom, and exhibiting what can be done with such things under skilful management even in a small state. From the same collection was Illicium religiosum, a handsome evergreen shrub from Japan, with shining leaves and yellowish-green flowers; the fruit of this is burned by the Japanese as a perfume at their religious services, and from this circumstance it derives the specific name. A Knightian medal was awarded for these.—A Cineraria, called the Pet, was exhibited by Mr. Ivery, of Peckham.—Messrs. Henderson, of Pine Apple-place, sent a Cyclamen, called Persicum rubrum, it had certainly, however, nothing to do with Persicum, but was a hardy European species, possessing a very agreeable perfume. Along with this were two Acacias, viz., prostrata and oxycedrus; the latter having a spiny foliage, and long tail-like yellow blossoms; a certificate was awarded for the Cyclamen.—Messrs. Rollisson and Sons, of Tooting, sent Dendrobium moniliforme, one of the most handsome of that showy genus; D. Cambridgeanum, a beautiful Indian species, which is found in its native country attaching itself to and ornamenting rocks and trees with its rich yellow blossoms. In colour it has considerable resemblance to Chrysanthum, and, like that species, it has a deep purple stain in the middle of the lip. Along with these was a variety of Cyrtochilum maculatum, the very rare Burlingtonia rigida, a fine species inhabiting the woods of Brazil, where it is found clinging, by means of its stiff wire-like roots, to branches of trees, and displaying its airy, gracefully-drooping racemes of pale lilac blossoms in abundance. From the same collection was Rhododendron Rollissonii, a beautiful Ceylon species, producing compact balls of bright crimson flowers; it is supposed to be the same as R. nobile. Along with it was a cut specimen of R. Zeylanicum, of a rich rosy-pink colour, approaching to white in the throat. A Knightian medal was awarded for the Burlingtonia rigida.—From Messrs. Veitch and Son, of Exeter, were three seedling Epacrises, the best of which was ardentissima. This was of a bright glowing red, the finest we have seen of the colour, showing what can be effected by judicious hybridisation of good sorts. If, however, as has been already attempted, impressa were crossed by grandiflora, something better might yet be expected.—Mr. Beck, of Isleworth, sent a neat slate pan for the growth of orchidaceous plants. That this material is in no way unfavourable to the growth of plants was proved by the fact that the most beautiful Archimenes picta possibly ever shown was exhibited by Mr. Beck in one of them on this occasion. This is one of the latest plants which Mr. Hartweg collected in South America, and proves to be one of the best of the genus, possessing beautiful rich brown and yellow flowers, and a fine variegated foliage. A Banksian medal was for it.—Among miscellaneous articles, Mr. Lawrence sent a gl to those in which gold fishes are kept, with [illegible] the top; in this Ferns have been kept since August last in good condition without the lid ever being removed. Also an improved zinc watering-pot, for watering plants without changing the position of the hands; it has a close top with a small aperture near the handle, this is closed in by a cap which is moved by the thumb up and down as required, thus causing the water to flow or to be held according as air is admitted or shut out.

Wardian Cases [illegible]

neath the material in which the plants are, and so contrived that hot water can be introduced when required, and drawn off by means of a plug when not wanted, warm dry air can also be carried to the top of the case through pipes. In such cases cuttings may be struck in the drawing room with almost as much certainty and facility as in the propagating-house.—From the garden of the Society was the larger variety of Oncidium sphacelatum, Epidendrum Stamfordianum, a species of comparatively recent introduction; the handsome E. aurantiacum, with rich orange blossoms; the rare Cypripedium barbatum, Hippeastrum Johnsoni, Begonia ulmifolia, with pure white flowers; two Epacrises; a handsome white variety of Rhododendron arboreum; and finally, a cut specimen of the new Mexican shrub Habrothamnus fasciculatus, which was figured in their Transactions as a plant of great beauty. In consequence, however, of something else (probably Cestrum roseum) having been introduced into collections for this, some doubts were apprehended as to its ever realising the expectations formed of it; but this the true H. fasciculatus, now blooming in the Society's garden, fully equals all that has been said of it In its native country it forms a noble shrub, about five feet in height, covered with multitudes of beautiful red blossoms, which are produced in clusters on the ends of the short flower-stems. In this country it should be grown slowly in as cool a situation as it will admit of without injury; and as it has a disposition to grow straggling, over-luxuriance should be checked as much as possible.

## FLORICULTURAL CALENDAR FOR APRIL.

**Amaryllises**, and other liliaceous bulbous plants which have been kept dormant, may now be re-potted, and put into an increased temperature.

**Annuals, Hardy**, such as Clarkias, Nemophilas, Larkspurs, &c.—The soil will now be moderately dry; sow the hardy kinds in sheltered situations till the end of the month; for if the seeds of many sorts begin to vegetate, and frost operate upon them, they are often destroyed. The best method of sowing the small seeds in patches is to have a quantity of finely sifted soil; spread a portion where desired; after scattering the seeds, sprinkle a little more soil over them, and then press it closely upon the seeds, which will assist them in vegetating properly.

**Annuals, Tender**, such as Cockscombs, Balsams, Stocks, &c.—Such as have been sown and may be up, should have all possible air given to prevent their being drawn up weakly. In watering those in pots they must not be watered over the tops, or many of the sorts will be rotted by it. The best method is to flood over the surface of each pot, always using water that is new-milk warm. Those annuals sown in frames must be watered (when requisite) with a very fine syringe, or pan-rose to sprinkle with; but the best plan is to take advantage of gentle rains. For any seeds yet requiring to be sown, use fine soil pressed to the seeds, and when convenient, place the pots (if used) in moist heat till the plants are up. Cockscombs, Amaranthus, Balsam, Browallia, Brachycoma, Thunbergias, Maurandias, &c., if large enough to pot, should be done in sixty-sized pots.

**Auriculas.**—Those requiring top-dressing should be done immediately, by taking off about two inches deep of the top soil, replacing it with some very rich; more than one-half of it should be rotten cow-dung two years old, and the rest loam and sand. Immediately after this dressing, let the soil be well settled by a free watering. By the end of the month the unexpanded blossoms will be nearly full grown; no water must be allowed to fall on them, or the blossoms would be liable to suffer injury by it. All possible air may be admitted to the plants during the day, only screen from cutting frosty winds.

**Campanula pyramidalis**—to have fine pot specimens should be potted, if not before done, and encouraged to grow.

**Carnations.**—At the end of the month, the last year's layers kept in pots or beds during the winter should be planted off into large pots 12 inches wide at the top, 6 at the bottom, and 10 deep. In each pot three plants may be placed triangularly, not planting deeper than to fix them securely.

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is most suitable:—Two barrows full of fresh yellow loam, three of well-rotted horse-dung, and half a barrowful of river-sand, well mixed; plant in it *without sifting*, but breaking very well with the spade, and have a free drainage of rough turf, &c.; place the plants in a sheltered situation out of doors.

CREEPERS—and twining greenhouse or hardy plants, should be pruned and regulated before they begin to grow, where growing early attention to training and thinning should be given.

CALCEOLARIA SEED—should be sown early in the month, having the finest sifted soil for the surface. Offsets root rapidly now, and should be potted off.

CHRYSANTHEMUMS—sow seed of, and raise in moist heat. Mind the suckers of old plants are not drawn up; admit duly of air. Pot off suckers for next blooming.

COMMELLINA TUBERS and Tigridia bulbs should now be planted.

CUTTINGS of Salvias, Fuchsias, Heliotropes, Geraniums, Celsias, Alonsoas, Lotuses, Senecios, &c., where it is desired to plant such out in beds, should be struck in moist heat as early as possible. Young shoots, cut off clean, strike readily. (See kinds of plants suitable, in vol. i., p. 38; and for additional kinds, subsequent vols.) Pot into small pots any struck to give vigour to them, to be better suited for turning out in May.

DAHLIAS—if not already put into excitement, should be done as early as possible. Seeds should also be sown, placing them in a hot-bed frame till up. Cuttings be taken off and struck in heat. Pot off struck cuttings.

ACHIMENES, Gesneria, Gloxinia, and Tropæolum bulbs, &c., that have been kept dry during winter, should now be potted, and gently brought forward in heat.

HERBACEOUS perennials, biennials, &c., should now be divided, if required.

HYDRANGEAS.—Cuttings may now be taken off, cutting off the tops of any shoots that have very plump leading buds about one inch below the bud of each cutting. These inserted, each into a small pot, and placed in moist heat, will soon strike root, and will, with future proper treatment, bloom one fine head each, strikingly beautiful. To make them bloom blue, use charcoal.

PANSIES divide successfully now; the shoots root freely at the under sides.

PELARGONIUMS.—Cuttings now put in, struck in a hot-bed frame, and potted off as soon as they have taken root, will bloom during autumn.

POLYANTHUSES—should now be top-dressed, as directed for Auriculas, only the soil need not be so rich. Seed may now be sown; the best method is to raise it in heat, harden gradually, and transplant when large enough. Offsets may be removed, or plants divided, if an increase is desired.

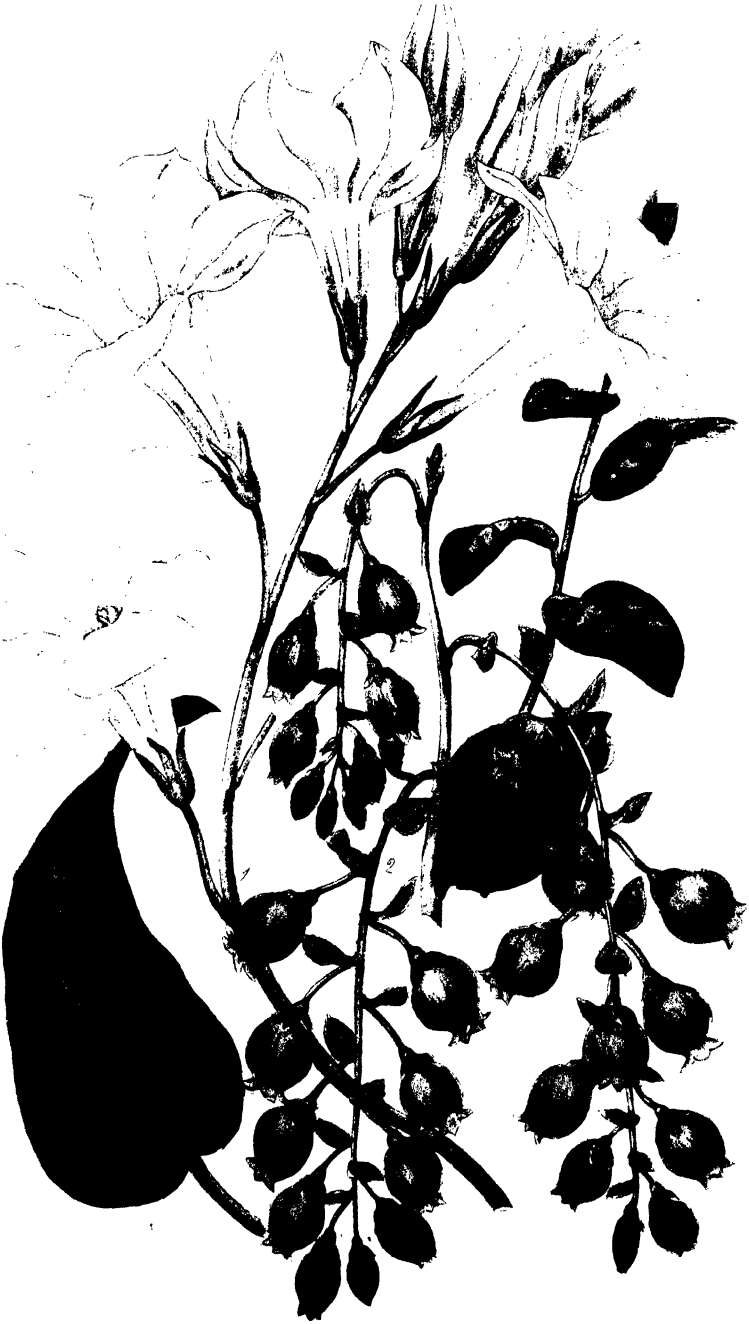
RANUNCULUSES and ANEMONES—should now be planted, taking care no fresh applied dung is in the soil, nor should the ground to plant in be lightened up more than two inches deep. The soil of the bed should be half a yard deep at the least. The best roots for flowering are such as have the crowns high and firm, with regular placed claws. Another bed, planted a fortnight later, brings them into bloom, so as to assist a florist to select for a show. Protect from excess of rain.

ROSE TREES—not yet pruned, if allowed to remain untouched till the shoots of the present coming season be about an inch long, and be then shortened by cutting back all the old wood to below where the new shoots had pushed, the dormant buds will then be excited, and roses will be produced some weeks later than if pruned at a much earlier season. Plants in pots now put into heat will come into bloom in May.

TUBEROSES—should be planted, one root in a small pot, using very rich sandy soil; the pots should be placed in moist heat till the plants are up a few inches; then they may be planted into larger pots, and taken into a stove, and finally into a greenhouse.

TULIPS.—At this season, such as happen to be affected with canker will appear sickly; the roots should be examined, and the damaged part be cut clean out. If left exposed to sun and air, the parts will soon dry and heal. Avoid frosty air getting to the wound by exposure. Protect from excess of rain.

SEEDS—of greenhouse and similar plants may now successfully be sown, raised in moist temperature.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# THE
# FLORICULTURAL CABINET,

MAY 1st, 1845.

## PART I.

## EMBELLISHMENTS.

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## ARTICLE I.

### 1. MANDEVILLIA SUAVEOLENS.

It is a native of South America, and is one of the prettiest conservatory or warm greenhouse climbing plants. It grows and blooms very freely, producing numerous snowy-white sweet-scented flowers, very interesting and ornamental. The plant well merits a place as a neat and valuable climber wherever it can be grown. It may now be procured at a reasonable price.

### 2. GAYLUSSACCIA PSEUDOVACCINEUM.—(Synonym Andromeda coccinea.)

This very pretty flowering evergreen shrub is a native of the sandy plains of Brazil. It flourishes freely in the greenhouse in this country, treated in all respects as are the Cape Ericas. We have seen it thriving well in the collection of Messrs. Loddiges, of Hackney Nursery. It well merits a place in every greenhouse. Those of our readers who know the habit and beauty of most of the Andromedas will at once conceive the present plant is well worth cultivating.

# ARTICLE II.

## OBSERVATIONS ON THE BROOM,

BY FLORA.

Not having noticed any observations in the Cabinet relative to the Broom as one of the most ornamental shrubs that adorn the pleasure ground, plantation, or forest wood, induces me to transmit the remarks below.

I have a peculiar attachment to the old yellow flowering Broom of our own country, and have an immense quantity forming belts at the sides of several large woods and plantations, besides a proportion in my shrubbery. When in bloom they are a mass of beauty, and when out always look cheerful, and afford an evergreen under shelter. I sowed seed, which is very cheap, in the situations I wished to ornament, and in the second year they bloomed very profusely. To encourage others to grow it in all its kinds is my present object. It is delightful to grow it by road sides, walks, in drives, &c., in woods.

The following interesting particulars upon it are selected from the pen of a celebrated author, and their admission into the Cabinet will, I think, be pleasing to the readers.

*English*, broom.—*French*, le genêt; le genêt a balais.—*Italian*, sparzio; scopa; ginestra; scornabecco; all referring to its use as besoms.*

The Brooms are very ornamental shrubs, with few leaves, but an abundance of brilliant and elegant flowers; they strike a deep root, but are too handsome to be rejected where room can be afforded for them.

The violet-coloured has no leaves, and is usually called the leafless Broom; it was found by Pallas in the Wolga Desert. The Spanish Broom has yellow—the Portugal, white blossoms. The white-flowered, one-seeded kind, is a native both of Spain and Portugal. " It converts the most barren spot into a fine odoriferous garden," says Mr. Martyn, speaking of this species.

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* The family of Plantagenet took their name from this shrub, which they wore as their device. It has been said that Fulk, the first Earl of Anjou of that name, being stung with remorse for some wicked action, went on pilgrimage to Jerusalem as a work of atonement, where, being soundly scourged with broom-twigs, which grew plentifully on the spot, he ever after took the surname of Plantagenet, or Broom-plant, which was retained by his noble posterity.

All the species here named will endure the cold without shelter; they do not like much wet. Our common Broom surpasses many of the foreign kinds in beauty; indeed few shrubs are more magnificent than this evergreen, with its profusion of bright golden blossoms.

" On me such beauty summer pours
That I am covered o'er with flowers;
And when the frost is in the sky
My branches are so fresh and gay
That you might look at me, and say,
This plant can never die.

* * * *

The butterfly, all green and gold,
To me hath often flown,
Here in my blossoms to behold
Wings lovely as his own."

*Wordsworth.*

They are the delight of the bees; and the young buds, while yet green, are pickled like capers. It is said that the branches are of service in tanning leather, and that a kind of coarse cloth is manufactured from them. The young shoots are mixed with hops in brewing, and the old wood is valuable to the cabinet-maker. Brooms are made from this shrub, and from their name it is supposed to have furnished the first that were made.

" Where yon brown hazels pendent catkins bear,
And prickly furze unfolds its blossoms fair;
The vagrant artist oft at eve reclines,
And broom's green shoots in besoms neat combines."

*Scott.*

In the north of Great Britain it is used for thatching cottages, corn, and hay-ricks, and making fences. In some parts of Scotland, where coals and wood are scarce, whole fields are sown with it for fuel.

But the Scotch have long been aware of the poetry as well as the utility of this beautiful shrub. The burden of one of their most popular songs is well known:—

"O the broom, the bonny bonny broom,
The broom of the Cowden-knows;
For sure so soft, so sweet a bloom
Elsewhere there never grows."

Burns lauds it, too, in one of his songs, written to an Irish air, which was a great favourite with him, called the Humours of Glen:—

"Their groves of sweet myrtle let foreign lands reckon,
Where bright beaming summers exalt the perfume;
Far dearer to me yon lone glen o' green breckan,
Wi' the burn stealing under the lang yellow broom.

"Far dearer to me are yon humble broom bowers,
Where the blue-bell and gowan lurk lowly unseen;
For there lightly tripping amang the sweet flowers,
A listening the linnet, oft wanders my Jean."

"'Twas that delightful season, when the broom
Full-flowered, and visible on every steep,
Along the copses runs in veins of gold."
*Wordsworth.*

Thomson speaks of it as a favourite food of kine. It flowers in May and June.

"Yellow and bright, as bullion unalloyed,
Her blossoms."

Broom makes a pleasant shade for a lounger in the summer; it seems to embody the sunshine, while it intercepts its heat.

"To noontide shades incontinent he ran,
Where purls the brook with sleep-inviting sound;
Or, when Dan Sol to slope his wheels began,
Amid the broom he basked him on the ground,
Where the wild thyme and camomile are found."
*Castle of Indolence.*

Mr. Horace Smith speaks of it as poisonous, yet most of the species are eaten by cattle; some are particularly recommended as a food for kine. The Base Broom, or Green-weed, is said to embitter the milk of the cows that eat of it; but, from the bitterness of the plant itself, they commonly refuse it.

"Willows and humble broom afford either browse for the cattle, or shade for the shepherds, and hedges for the fields, and food for bees."
*Martyn's Translation.*

The poet is supposed to intend the Spanish Broom in this passage, which grows plentifully in some parts of Italy, and of which the Italians weave the slender branches into baskets.

Virgil speaks of it as the "bending Broom." In England the Broom has generally a kind of sharp and arrow-like straightness; in Italy, where it rises higher than in this country, the branches being very slender do not support themselves so stiffly.

Clorin, in the Faithful Shepherdess, reproves

———————— "the lazy clowns
That feed their heifers in the budded brooms."

Mr. Seward observes, in a note upon this passage, that this instance of laziness is taken from Spenser's Shepherd's Calendar for February, and supposes it to mean that they leave their herds among the Broom, which grows on the worst soil, instead of driving them into the best pastures.

"So loitering live you little herd-grooms,
Keeping your beasts in the budded brooms."
*Spenser.*

Dr. Hall complains much of the negligence of the farmers in taking so little heed to check the growth of thistles, furze, broom, &c., even in the fields in the neighbourhood of Edinburgh. "It is well known," says he, "that the seeds of thistles, rag-weed, and the like, are blown with the wind, and that though furze, as Lord Kaimes observes, is the only shrub in Britain that flowers all the year round; and Broom in bloom is one of the most beautiful shrubs we have, and appears like gold at a distance, yet they ought, if possible, to be completely extirpated out of those parts of the country where sheep are not reared."

Browne alludes to the use of Broom in thatching:—

"Among the flags below there stands his coate,
A simple one, thatched o'er with reed and broom;
It hath a kitchen, and a several room
For each of us."
*Britannia's Pastorals.*

A Russian poet speaks of the Broom as a tree:—

> "See there upon the broom-tree's bough
> The young grey eagle flapping now."
>
> *Bowring's Russian Anthology.*

The blossom of the common Broom closely resembles that of the furze, both in form and colour—that furze which sheds such a lustre over our heaths and commons, and at sight of which, it is said, Dillenius fell into a perfect ecstasy. In many parts of Germany the furze-bush is unknown. Gerarde says, that about Dantzic, Brunswick, and in Poland, there was not a sprig of either Furze or Broom; and it is really a striking sight to come suddenly upon a common, glowing, as it were, in one great sea of gold. Gerarde adds, that, in compliance with earnest and repeated entreaties, he sent seeds to these places, and that the plants raised from them were curiously kept in the finest gardens. Furze bears various names in different parts of England: Furze in the south, Whin in the east, and Gorse in the north.

> "The prickly gorse that, shapeless and deformed,
> And dangerous to the touch, has yet its bloom,
> And decks itself with ornaments of gold."
>
> *Cowper's Task.*

> "Or from yon swelling downs, where sweet air stirs
> Blue harebells lightly, and where prickly furze
> Buds lavish gold."
>
> *Keats's Endymion.*

St. Pierre evidently alludes to the furze-bush in the following passage:—"I saw in Brittany a vast deal of uncultivated land; nothing grows upon it but Broom, and a shrub with yellow flowers, which appeared to me a composition of thorns. The country people called it Lande, or San; they bruise it to feed their cattle. The Broom serves only to heat their ovens. It might be turned to better account. The Romans made cord of it, which they preferred to hemp, for their shipping."—*St. Pierre's Voyage to the Isle of France.*

## ARTICLE III.

### OBSERVATIONS ON THE CULTURE OF FLOWERS, &c.,

BY SARAH ELIZABETH.

It has afforded me much pleasure to observe, that ever since the first number of the Floricultural Cabinet there has been an increasing attention given to the cultivation of flowers, both in exotics and hardy kinds.

The very cheering change in the present season excites even talent, floral habits, and propensities, and urges to the delightful and healthful pleasures of the flower-garden. I very recently met with the following remarks on the culture of flowers, which when taken in connexion with the now delightful spring season, I was so much pleased with them as to be induced to forward them for insertion in the May number.

When summer's delighful season arrives, rarely in this country too warm to be enjoyed throughout the day in the open air, there is nothing more grateful than a profusion of choice flowers around and within our dwellings. The humblest apartments, ornamented with these beautiful productions of nature, have, in my view, a more delightful effect than the proudest saloons with gilded ceilings and hangings of Genoa velvet. The richness of the latter, indeed, would be heightened, and their elegance increased, by the judicious introduction of flowers and foliage with them. The odour of flowers, the cool appearance of the dark green leaves of some species, and the beautiful tints and varied forms of others, are singularly grateful to the sight, and refreshing at the same time. Vases of Etruscan mould, containing plants of the commonest kind, offer those lines of beauty which the eye delights in following; and variform leaves hanging festooned over them, and shading them if they be of a light colour, with a soft grateful hue, add much to their pleasing effect. These decorations are simple and cheap.

Lord Bacon, whose magnificence of mind exempts him from every objection as a model for the rest of mankind (in all but the unfortunate error to which, perhaps, his sordid pursuit in life led him, to the degradation of his nobler intellect), was enthusiastically attached to flowers, and kept a succession of them about him in his study and at his table. Now the union of books and flowers is more particularly agreeable. Nothing, in my view, is half so delightful as a library set off with these beautiful productions of the earth during summer, or, indeed, any season of the year. A library or study, opening on green turf, and having the view of a distant rugged country, with a peep at the ocean between hills, a small fertile space forming the nearest ground, and an easy chair and books, is just as much of local enjoyment as a thinking man can desire. I reck not if under a thatched or slated roof, to me it is the same thing. A favourite author on my table, in the midst of my bouquets, and I speedily forget how the rest of the world wags. I fancy I am enjoying nature and art together, a consummation of luxury that never palls upon the appetite—a dessert of uncloying sweets.

There is something delightful in the use which the Eastern poets, particularly the Persian, make of flowers in their poetry. Their allusions are not casual, and in the way of metaphor and simile only; they seem really to hold them in high admiration. I am not aware that the flowers of Persia, except the rose, are more beautiful or more various than those of other countries. Perhaps England, including her gardens, green-houses, and fields, having introduced a vast variety from every climate, may exhibit a list unrivalled, as a whole, in odour and beauty. Yet flowers are not with us held in such high estimation as among the Orientals, if we are to judge from their poets.

Bowers of roses and flowers are perpetually alluded to in the writings of Eastern poets. The Turks, and indeed the Orientals in general, have few images of voluptuousness without the richest flowers contributing towards them. The noblest palaces, where gilding, damask, and fine carpeting abound, would be essentially wanting in luxury without flowers. It cannot be from their odour alone that they are thus identified with pleasure; it is from their union of exquisite hues, fragrance, and beautiful forms that they raise a sentiment of voluptuousness in the mind; for whatever unites these qualities can scarcely do otherwise.

Whoever virtuously despises the opinion that simple and cheap pleasures, not only good, but in the very best taste, are of no value because they want a meretricious rarity, will fill their apartments with a succession of our better garden flowers. It has been said that flowers placed in bed-rooms are not wholesome. Plucked and put into water they quickly decay, and, doubtless, give out a putrescent air; when alive and growing there need not be any danger apprehended from them, provided fresh air is frequently introduced. For spacious rooms the better kinds, during warm weather, are those which have a large leaf and bossy flower. Large leaves have a very agreeable effect on the senses; their rich green is grateful to the sight; of this kind, the Hydrangea is remarkably well adapted for apartments, but it requires plenty of water. Those who have a greenhouse connected with their dwellings, have the conveniences, by management, of changing their plants as the flowers decay; those who have not, and yet have space to afford them light and occasionally air, may rear most of those kinds under their own roofs, which may be applied for ornament in summer. Vases of plaster, modelled from the antique, may be stained any colour most agreeable to the fancy, and fitted with tin cases to contain the earthen pots of flowers, to prevent the damp from acting on them, will look exceedingly well.

The infinite variety of Roses, including the Guelder Rose, the Rhododendron, and other plants of similar growth, are fitted for the saloon, but they please best in the library. They should be intermingled with the bookcases, and stands filled with them should be placed wherever practicable. They are a wonderful relief to the student. There is always about them a something that infuses a sensation of placid joy, cheering and refreshing. Perhaps they were first introduced at festivals, in consequence of their possessing this quality. A flower-garden is the scene of pleasurable feelings of innocence and elegance. The introduction of flowers into our rooms infuses the same sensations, but intermingles them more with our domestic comforts; so that we feel, as it were, in closer contact with them. The succession might be kept up for the greater part of the year; and even in winter evergreens will supply their places, and, in some respects, contrast well with the season. Many fail in preserving the beauty of plants in their apartments, because they do not give them sufficient light; some species do well with much less light than others. Light is as necessary to them as air. They should not be too often shifted from one place to another. Those who will take the trouble may quicken the growth of some plants, so as to have spring flowers in winter. Thus autumn and spring might be connected; and flowers blooming in the winter of our gloomy climate possess double attractions.

For my own part I manage very well without the advantage of a greenhouse. The evergreens serve me in winter. Then the Lilacs come in, followed by the Guelder Rose and Woodbine, the latter trained in a pot upon circular trellis-work. After this there can be no difficulty in choosing, as the open air offers every variety. I arrange all my library and parlour-plants in a room in my dwelling-house, facing the south, having a full portion of light, and a fire-place. I promote the growth of my flowers for the early part of the year by steam-warmth, and having large tubs and boxes of earth I am at no loss, in my humble conservatory, for attending them is all my own, and is one of those employments which never appear laborious. Those who have better conveniences may proceed on a large scale; but I contrive to keep up a due succession, which to a floral epicure is everything. To be a day in the year without seeing a flower is a novelty to me; and I am persuaded much more might be done with my humble means than I have effected, had I sufficient leisure to attend to the retarding or forcing them. I cover every space in my sitting-room with the beautiful fairy things of creation, and take so much delight in the sight of them, that I cannot help recommending those of limited incomes, like myself, to follow my example and be their own nurserymen. The rich might easily obtain them without; but what they procure by gold the individual of small means must obtain by industry. I know there are persons to whom the flowers of Paradise would be objects of indifference; but who can imitate or envy such? They are grovellers, whose coarseness of taste is only fitted for the grossest food of life. The pleasures "des Fleurs et des Livres" are, as Henry IV. observed of his child, "the property of all the world."

## REVIEW.

*Observations on the Cultivation of Roses in Pots, by W. Paul; Nurseries, Cheshunt, Herts.* Published by Sherwood and Co., London. pp. 32.

(*Continued from page* 61.)

**Bourbon.**—This class of Roses is truly elegant. It has also been much extended lately, and become more varied, by the introduction of many purple, crimson, and blush roses. Before the appearance of these, the Bourbons were nearly all of a rose colour. Probably the dark varieties now obtained have something of the Chinese in them; but should the crossing not affect their hardiness, which I venture to predict it will not, they will rival, and, in one point (profusion of bloom), surpass their progenitors. The colours of the Bourbon Roses are very clear; the petals smooth, thick, and large, and generally well-formed.

*Amarantine, lively rose.
Armosa, fine bright pink.
Augustine Lelieur, vivid, even rose.
Celimene, fine clear blush.
Comte de Rambuteau, clear reddish violet.
Coupe d'Hebe, deep rose.
Delille (new), deep rose, finely formed.
*Desiré Roussell, clear flesh.
Dumont du Courset, very deep crimson, often shaded.
George Cuiver, bright cherry, edged with clear rose.
Gloire de Paris, bright dark crimson violet.
Grand Capitaine, rich carmine.
Madame Nerard, silvery pink blush.
Madame Souchet, pale rose when opening, often edged with lake.
Paul Joseph, superb velvety crimson.
Princess Clementine, violet red, changing to purple.
Queen, buff rose, fine.
Souchet, large, rich crimson purple.
Souvenir de Dumont—d'Urville, cherry, changing to violet.
Speciosa, full, shaded rose.
Theresia Margat, bright pale rose.
Virgil, rose, finely formed.

(*T.*) CHINESE, OR BENGALEE.—Among the Autumnal Roses these are very valuable, being continually in flower. They group admirably with the Tea-scented; and their colours being, in part, those which are deficient among the latter, they are the more to be valued.

The Lawrencianas are very pretty Roses, but do not group well with any others. A few varieties will be given here; for when the plants become of some size, and are covered with their diminutive buds and blossoms, they are really interesting objects. They delight in a light sandy soil.

Abbé Mioland, rosy purple, striped.
Alba, or white.
Angustine Hersent, deep pink.
Cramoisie superieure, bright velvety crimson.
Duchess of Kent, white, edged with rose.
*Fabvier, scarlet.
Madame Breon, large brilliant rose.
Madame Chavent, large, rosy pink.
Madame de Rohan, blush white.
Mrs. Bosanquet, beautiful pale flesh.
Napoleon, large blush pink.
Prince Eugene, crimson purple.
Reine de Lombardie, rose, blush and crimson, variable.

LAWRENCIANAS.

Alba Minor, white.
Caprice des Dames, pink.
Fairy, pale rose.
La Laponne, bright pink.
Pumila, rose.
Rubra, brilliant crimson.

(*T.*) TEA-SCENTED.—These are, in fact, but a selection from the Chinese, on account of their peculiar odour and shining foliage. They are well suited for growing in pots. They are tender, and should have some protection from frost in winter. The best way of growing these and the preceding class is, perhaps, in pits, as previously advanced, where they may be sheltered from the cold nights or rough weather, at any season, by placing the lights on. They are excellent forcing Roses, and more admired than any others when grown in pots, the tints being rich and delicate.

Adam, large clear rose.
Archiduchesse Thérése, creamy white and yellow.
Bardon, blush and salmon pink.
Bride of Abydos, creamy white, tinged with rose.

Caroline, rose and blush pink, shaded.
Cels multiflore, pale flesh.
Clara Sylvain, white, centre cream.
Comte de Paris, large flesh-coloured rose.
Comte d'Osmond, white, centre yellow.
Devoniensis, large, pale yellow.
Don Carlos, pale buff and salmon.
Eliza Sauvage, fine yellow, centre orange.
Eugene Desgaches, bright rose.
Goubault, large rich rose, centre buff.
Josephine Malton, large shaded buff and white.
Julie Mansais, delicate pure white, large.
La Renommé, white, centre pale yellow, fine.
Lyonnais, large, rose and lilac, shaded.
Madame Dupuis, white, centre rose and yellow.
Madame Roussel, white, centre flesh.
Mansais, large rose, shaded with buff.
Nina, fine clear flesh.
Pellonia, pale yellow.
Perfection, nankeen, centre rose.
Taglioni, creamy white, buff centre.

It would be useless to offer any remarks as to which of the preceding should be grown as dwarfs, and which as dwarf standards; for most of them do well in either way. This, then, is better left to the option of the cultivator.

The classes which the letter *S* precedes are Summer Roses; the others continue flowering throughout the autumn; during which period they should be plentifully supplied with water.

The letter *T*, preceding any class, indicates that the varieties of which it is composed require protection in winter.

## CLIMBERS.

Climbing Roses should be invariably grown on their own roots; and being chiefly kept in pots, their cultivation may commence at any season we please. What we have hitherto been accustomed to regard as Climbers are from the classes Boursault, Sempervirens, Ayrshire, &c. Magnificent as such must be regarded when growing in the open ground, often to the height of twenty feet, and covered with immense trusses of bloom, their semi-double and transient flowers render the greater part not altogether suitable for growing in pots. A growth not too vigorous, and finely-shaped flowers, should be the criteria with regard to Roses grown in pots as climbers. As a great height, then, is not in this instance desirable, the various Hybrids, the Noisettes, and Bourbons, may be chosen, and trained upwards to about three feet, which will probably be found as high as convenient or manageable: not that we would, however, altogether exclude the Ayrshire and Sempervirens, for among them a few admirable Roses are to be found.

Now, one great point to be held in view is, to induce the plants to flower from the summit to the ground; for if a few flowers only are to be produced at the top of the plant, then the dwarfer it can be grown the better. This, complete flowering, judicious pruning, and training, will accomplish.

### Training and Pruning Climbers.

In training, they may be formed into any shape. Such varieties as have long twining or flexible shoots may be trained spirally, with which view, in pruning, in the first instance, they should be cut-in close, to induce them to form lengthened shoots, which should be trained in their proper course during the season of growth. By this treatment, in all probability, they will not flower the first year; but if, after this, the main shoots be merely stopped, and the lateral ones cut within a few eyes, an abundance of bloom will be secured the succeeding year. Any superfluous shoots may, of course, be removed; but under this system of growth a small amount of pruning only is necessary.

The stiff, erect growing kinds may be formed into short pillars of a pyramidal form, or trained to flat wires. The former presents the most natural appearance; and to effect this, from three to five shoots may be allowed in the first instance, and pruned of different lengths: these will throw out laterals, and a short pillar rose is formed. In after seasons they may be pruned, as proposed for other Roses.

### Climbing Varieties.

Here, then, is a list of such varieties as appear best adapted for this purpose.

*To train spirally, or as twiners.*

HYBRIDS OF THE CHINESE.

Beauty of Billiard, beautiful vivid scarlet.
Blairii, No. 2, large blush pink.
Fulgens, rich velvety crimson.
General Kleber, purplish red, changing to violet.
Hippocrates, deep crimson lilac.
*Ne Plus Ultra, fine carmine.
Pompon Bicolor, purple and crimson shaded.
*Princess Augusta, bright crimson and purple mottled.
Triomphe de Laqueue, red and purple, shaded.

BOURSAULT.

*Amadis, purplish crimson.
Gracilis, bright rosy red.

AYRSHIRE.

*Ruga, pale flesh.
*Splendens, white, tipped with red.

SEMPERVIRENS.

Banksiaflora, white, centre pale yellow.
Félicité Perpétue, creamy white.
Leopoldine d'Orleans, white, shaded with rose.
Myrianthes Rénoncule, delicate rose.

BOURBON.

De L'Isle, bright rose.
Etoile de Lyons, purplish rose.
Phœnix, reddish purple.
Souvenir D'Anselmne, bright scarlet.

NOISETTE.

Desprez, rose and reddish yellow.
D'Espalais, rose.
Du Luxembourg, lilac rose, red centre.
Fleur du Jeune Age, white, yellow centre.
La Biche, large pale flesh.
Lemarque, fine sulphur yellow.
*Prudence Rœser, lilac blush, sometimes rose, blooming in clusters.†

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† This Rose has hitherto been classed as a Hybrid Perpetual; but differing so much from the general run of these, and having the characteristics of a Noisette Rose, I have ventured to introduce it here.

### *To train upright, as Pillars or Pyramids.*

HYBRIDS OF THE CHINESE.

Aurora, crimson and violet shaded, sometimes striped with white.
Belle de Rosny, delicate peach.
Belle Marie, superb large rose.
Brennus, rich carmine, large.
Captain Sisolet, beautiful rose.
Charles Duval, fine deep pink.
Chénédolé, rich vivid crimson, very large.
Dandigné de la Blanchaie, dark slaty purple.
Duke of Devonshire, rosy lilac, striped with white.
*Great Western, crimson and purple, very large, blooming in clusters.
*Henry Barbet, deep vivid rose.
Hybrid Stadtholder, fine light rose.
La Grandeur, large rose.
*Lord John Russell, brilliant even rose.
Madame Plantier, pure white.
Madame Rameau, dull violet purple, centre bright crimson.
Paul Perras, beautiful large rose.
Richelieu (Duval), pale pink, finely formed.
Victor Hugo, large rosy lilac.

HYBRID PERPETUAL.

Dr. Marx, rosy carmine.
Duchess of Sutherland, fine pale rose.
Madame Laffay, brilliant rose, superb.

BOURBON.

Bouquet de Flore, light carmine.
Hennequin, bright crimson purple, fine.
Marquise d'Ivry, deep bright rose.

NOISETTE.

*Bouton Nankin, nankeen, changing to blush distinct.
*Fellenberg, bright crimson.
*Euphrosyne, pale rose and yellow, very sweet.

### FORCING.

Roses required for forcing will succeed tolerably well if potted early in the preceding autumn. It is, however, obvious, that, by being potted a twelvemonth previously, they become established and better enabled to support an accelerated growth and premature development of bloom. If, therefore, we are anxious to obtain a good bloom of forced Roses, and have plants that have been a twelvemonth or more in pots, they should certainly be taken in preference, for the purpose, and the fresh-potted ones be allowed to grow on for the natural season of flowering. Presuming, then, the plants about to be forced have been grown one season in pots, we will proceed with our subject.

### HEATING FORCING-HOUSE.

The various systems of heating horticultural buildings now in vogue have been frequently descanted on in the gardening periodicals, and it would be out of place to speak of them here, except in general terms. Heating by hot-water, in its various modes of application, which have now become general, is universally acknowledged to be preferable to the old flue system, and in no instance more so than for forcing Roses: nevertheless, they will force well upon the old flue system. As, however, as must be apparent, syringing should be more freely resorted to here; and a pot or two of water, poured down on the floor of the house every morning, is necessary, to keep a moist atmosphere, which is very favourable to forced Roses, and, at the same time, noxious to the red spider, which it is not impossible should appear under the flue system of heating. Arnott's stove is also used by some, and is found to answer exceedingly well.

[We again recommend the pamphlet to our readers as well deserving to be possessed.—CONDUCTOR.]

## PART II.

## LIST OF NEW AND RARE PLANTS.

**BLANDFORDIA MARGINATA. ROUGH-EDGED.** (Bot. Reg. 18.) Liliaceæ. Hexandria Monogynia. A native of Van Dieman's Land, where it grows abundantly. It is in the collection of Messrs. Osborne and Co., of Fulham, near London, where it bloomed last year in the greenhouse. It is an inhabitant of wet places, and, consequently, in the growing season, requires a liberal supply of water. The flowers are produced in a long conical shaped raceme, of a deep rich red-copper colour outside, and yellow within, and at the edges of the petals. It is a very interesting and pretty flowering species. There have been discovered two other new species. In Van Dieman's Land, viz., B. Backhousii, which produces its flowers in a large corymbous head of more than twenty in each. B. Cunninghamii, in New Holland. The flowers are very large, of an uniform red colour outside, yellow within.

CESTRUM AURANTIACUM. ORANGE-COLOURED. (Bot. Reg. 22.) Salanaceæ. Pentandria Monogynia. Mr. Skinner obtained this new species from Guatemala, It bloomed in the Chiswick Garden last August. It is a handsome greenhouse shrub, which blooms profusely. The flowers are produced in spikes, numerously, altogether forming fine heads. Each blossom is about an inch long, of a rich orange colour, having too the perfume of orange peel. It flourishes in the open border, in summer, and well deserves to have a place in the same, or in the greenhouse.

DENDROBIUM MONILIFORME. NECKLACE-STEMMED. (Bot. Mag. 4153.) Orchidaceæ. Gynandria Monandria. (Synonym. Limodorum moniliforme.) A native of China and Japan. It has bloomed at Kew, in November, 1844, and February, 1845. It is one of the most lovely of the Orchideous Epiphytes. The flower stems grow about a foot high, and the blossoms are produced towards the top portions of the stems. Each blossom is about two inches and a half across. Sepals and petals white, having the upper half of a purple-blush. Lip small, white tipped, with deep purple. It is a very handsome species.

DISOPHYLLA STELLATA. THE STARRY. (Bot. Reg. 23.) Lamcaceæ. Didynamia Gymnospermia. (Synonym, Mentha quaternifolia.) A native of India. in the Malabar and Mysore countries. It is a delicate little light green plant, looking much like the Ladies Bedstraw of our own country hedges and banks. The flowers are produced in spikes, of a pretty purple colour, having much the appearance in form of the spike of a Mimosa when in full bloom. It is a very neat and beautiful greenhouse plant. It bloomed in the garden of the Earl of Auckland last October.

GESNERIA SCHIEDEANA. M. SCHIEDE'S GESNERIA. (Bot. Mag. 4152.) Gesneriacea. Didynamia Angiospermia. Sent from Mexico to the Duke of Bedford's collection, at Woburn Abbey Gardens, where it bloomed last November. It is an erect growing plant. Producing numerous long stems of flowers, in whorls, around the stems. Each blossom is near an inch long, of a rich scarlet colour, and the limb yellow dotted with red.

IOCHROMA TUBULOSA. THE TUBULAR. (Bot. Reg. 20.) Solonaceæ. Pentandria Monogynia. (Synonym, Habrothamnus cyaneus.) It was discovered by Mr. Hartweg, growing on the mountains of Yangana, near Loxa. It is a handsome, free flowering, half hardy, greenhouse shrub, blooming from June to November. The flowers are produced in terminal cymose heads of a dozen or upwards in each. The corolla is tube shaped, about an inch and a half long, of a deep blue outside, and purple within. It is a very pretty interesting plant, well deserving a place in the greenhouse or conservatory. It flowered in the garden of the Horticultural Society, at Chiswick, last autumn.

SPATHOGLOTTIS FORTUNI. MR. FORTUNE'S. (Bot. Reg. 19.) Orchidaceæ. Gynandria Monandria. This pretty little Bletta like plant was one of the first that Mr. Fortune, the collector sent out by the London Horticultural Society, met with in China, growing on the granite mountains of Hong Kong. The flowers are produced in erect racemes, several in each, a single blossom is about an inch across, of a bright yellow colour. It appears there are other species which have been discovered, viz., S. pubexens, S. parcifolia, and S. tomentosa, all with yellow flowers, all interesting and pretty.

LOBELIA THAPSOIDEA. MULLEIN-LIKE. (Bot. Mag. 4150.) Lobeliaceæ. Pentandria Monogynia. The genus Lobelia has been considerably reduced by the genera that have lately been separated from it, as Siphocampylus, Tupa, &c., yet there are 173 species described in De Candoile's Prodromus. The present species was sent to this country by Mr. Gardner, who gathered specimens eight feet long. The flowers are of a purple-blue, producing a splendid appearance.

AERIDES MACULOSUM. SPOTTED AIR-PLANT. (Pax. Mag. Bot.) Orchidaceæ. Gynandria Monandria. This very beautiful species was sent from Bombay two years ago, and last summer bloomed in the collection of C. Horsfall, Esq., of Liverpool. The flowers are arranged in racemes, which usually have lateral ones proceeding from the sides. The graceful half-nodding racemes of flowers, of the mingled purple, rose, carmine, and yellow, tints and spots, produce a very beautiful appearance. The blossoms are deliciously fragrant. It deserves to be in every collection.

BUGAINVILLEA SPECTABILIS. THE REMARKABLE. (Pax. Mag. Bot.) Nyctaginaceæ. Octandria Monogynia. An evergreen climbing shrub, very suitable for a conservatory or greenhouse. It is a native of Peru. The flowers are large, being three inches across, of a beautiful rich purple colour. It well deserves a place in either situation.

AZALEA INDICA, VAR. OPTIMA. (Pax. Mag. Bot.) The flowers are large, of a rich red, shaded with dark crimson. A. Broughtoni, a beautiful rose, shaded with lilac. A. exquisita, pink, with white margined petals. All very handsome. They have recently bloomed with Mr. Knight.

# PART III.

# MISCELLANEOUS INTELLIGENCE.

## QUERIES.

ON CALLA ÆTHIOPICA.—A subscriber from the commencement of the FLORICULTURAL CABINET will feel much obliged if a correspondent will give some information respecting the treatment of the Arum Lily, or Calla Æthiopica, the proper compost, &c.

February 24th.

[The plant is now named Richardia Æthiopica. It thrives in a rich turfy loam and turfy sandy peat, two parts of the former to one of the latter, chopped, not sifted, compost, and to have a free drainage. It flourishes in a warm greenhouse, having plenty of light, and the pot to be placed on wood, not stone, or similar cold material. In its growing state requires to have a liberal supply of soft water; during winter just enough to save it from drought.—CONDUCTOR.]

ON VERBENAS, ANAGALLIS, PETUNIAS, AND CALCEOLARIAS.—During winter I have lost nearly all my stock of the above, will cuttings now put in be strong enough to plant out in beds the coming season. LUCY.

[If the stock plants now have lateral shoots four or five inches long, they should be cut off clean at their origin, inserted in sandy loam or peat, and be placed in a moist heat, they will readily strike root on doing so; early pot them singly, and replace them in heat to start them, after which gradually inure them to a temperature, so that by the end of May, or early in June, they might be planted out with entire balls. These plants may be expected to bloom by the middle or end of July. In order to have a vigorous display and earlier, too, strong plants had better be procured at once.—CONDUCTOR.]

ON CLIANTHUS PUNICEUS.—A constant subscriber begs to be informed of the probable reason why a fine plant of Clianthus puniceus, which flowered profusely this spring, should have lost all its leaves in the centre of the plant. The leaves near the root and at the top are abundant. It is still growing vigorously, and has not suffered from either snails or red spider, but it is stripped of leaves in the middle. Is it the habit of the plant? It must be about four years old, and is planted on a south wall of the house.

August 10, 1844.

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ON LILIUM LANCIFOLIUM.—Isabella is desirous of being informed whether the kinds of Lilium lancifolium have been grown and succeeded to satisfaction in the open air. An early answer will be an additional favour, as if they do succeed it is her intention to procure some to plant out this spring.

Totnes, Devon, Feb. 17, 1844.

[We have seen a large bed of Lilium lancifolium album, grown in the open air, and blooming beautifully, and several of the punctatum and rubrum do equally well. The bulbs were planted in small pots, and kept in a cool frame, and the plants turned out early in spring into the open bed, the soil of which was a sandy peat and light loam, about equal parts. There is no doubt but that they may be planted out at once into a bed or border, as done with the old kinds of Lilies, where the substratum is dry and the compost light, as above described, and will flourish equal to the common kinds. We have been informed by a friend that he has tried it one season with entire success.—CONDUCTOR.]

ON ORANGE TREES.—I am but a beginner in gardening, but having erected a small conservatory and a greenhouse I have a promise of a present of a dozen Orange Trees, which have been in the possession of my friend for several years, but they grow weakly, and appear of a sickly yellow hue. What is the best kind of compost to grow them in, in tubs or large earthen pots, as on my first obtaining the plants I intend to remove them into one or the other. An answer in the March CABINET will much oblige, ENQUIRER.

[Chopped turfy-loam, well enriched with rotten cow-dung, to which add one quarter of turfy sandy peat and a tolerable sprinkling of bits of charcoal, and small granite stones added. In this compost, with a free bottom drainage, and not to be over-potted, the plants will grow vigorously, if otherwise properly attended to. We have seen them growing quite robust in such compost.—CONDUCTOR.]

## REMARKS.

ON PRESERVING EXOTIC PLANTS SUITED FOR THE FLOWER-GARDEN IN SUMMER DURING WINTER, AND EARLY SPRING.—The flower-gardens are, during the summer months, in many cases, almost exclusively decorated with exotics; and too much cannot be said in favour of a practice that enables them to rival, for a time, the sun-lit scenes of happier climes, from which we have lately received many plants so perfectly suited to such a purpose, and so exquisitely lovely when displaying their beauty in masses, that without them our gardens would be a blank indeed. What, in all the range of floral beauty, unlimited as it is, could compensate us for the loss of even that single group, the matchless Verbenas? The duration of plants used for this purpose, under the mode of culture this practice has introduced, is only annual; as they require to be propagated in autumn or spring, produce their blossoms during the season, and perish at its close. As they cannot be turned out with any certainty of success until the season is far advanced, the small plants require to be planted thick enough to cover the soil, and produce an immediate effect. Thus a moderate sized garden requires a considerable number of plants to furnish it annually, a prospect that would have appalled even the best gardeners of yore; but at the present day, where sufficient means are allowed, the propagation of the plants is a matter of no difficulty. In cuttings, put in during February or March, failures seldom occur; when they do, they are generally the effect of too much confinement, and not, as is often assumed, of too much water. For the sort of cuttings I am speaking of, during the early part of the season, double glass is altogether unnecessary: watering them overhead during sunshine, while air is admitted, will prove of more service than covering them with glasses or shading, a practice that ought to be avoided.

The inexperienced will find a frame with a little bottom heat, covered four or five inches deep with light soil, the cuttings planted in the soil, a most efficient apparatus; and those who possess a stove or hothouse will find that cuttings in pots, plunged in the bark-bed, and fully exposed to the light, will root without further trouble.

The introduction of so many plants into the houses at a time when those wintered there are beginning to grow, and require more room, is a serious evil;

to remove which as soon as possible, we are apt either to turn out the plants before the proper season, when they often suffer so much from premature exposure, that we are forced to replenish the beds, or endure their squalid appearance during half the season; or to retain the young plants, fifty or sixty together, in the cutting-pots, until they are finally turned out. This, no doubt, saves room, the labour of potting, and watering in a great measure; but it is the practice of the sluggard, and ought to be avoided with all his doings, as the plants invariably thrive better when potted singly, and allowed to establish themselves in the pots. To avoid these habits, and still retain house-room for more important purposes, select a sheltered spot, fully exposed to the sun, over which erect a temporary framework of rafters to support a roller, with canvas or matting. Cover the bottom of the space enclosed with sand. When the plants have been potted off, the pots filled with roots, and tolerably hardened, let them be taken to this shelter, carefully turned out of the pots, and each plant placed upon a small piece of turf previously placed upon the sand. As the plants are not expected to increase much in size while they remain here, they may be placed rather close together, thereby sheltering each other, and making the most of the space covered. As the plants are placed, let the space between each be filled up with sand, when they will require little attention, save an occasional watering, until they are removed to their final destination. Under such a shelter, the hardier sorts, or such as have been propagated in autumn, may be placed as early as the 1st of March; the pots, and the room in the house that they occupied, to be employed in forwarding others to be treated in the same manner. High or cutting winds, heavy rains, and cold, are to be guarded against, during which the canvas must remain down.

The mere saving of room is not the only recommendation such a practice possesses. When the plants are taken up with the small piece of turf attached, it will be found that they have formed numerous strong and fleshy spongioles, ready to seize upon the soil with the greatest avidity. They likewise suffer much when taken from under glass, and exposed to the direct influence of light: placed out so early, the cause is less powerful; the effect, consequently, less felt; and what they do suffer in appearance is entirely recovered while they remain where their appearance is not of the smallest consequence. Those who possess propagating-houses, and every convenience to supply the plants required of them, may deem it unnecessary to employ such an auxiliary; but the number of such is limited indeed, when compared with those who happily take an interest in a garden, and strive to make the most of the means placed at their disposal: to those who have only a greenhouse it is invaluable. Persons so situated would do well to propagate as many as possible in autumn; retain them in the cutting-pots during the winter, allowing them plenty of air, as the best safeguard against damp, the greatest enemy to plants at such a season; pot them off, and place them under the shelter already recommended in spring. When judiciously managed, it is surprising how many plants may be thus produced, even by a single frame. Annuals intended for planting out in beds, for which purpose there are many sorts well adapted, ought to be sown in autumn, and treated in every respect like cuttings, when they will produce a far finer display than those raised in spring.

Specimen greenhouse plants, in pots, placed singly or in groups upon the lawn, when properly introduced, produce a fine effect. To prevent plants so placed having their roots injured by the action of the sun upon the pots, they ought to be plunged, or otherwise covered, and proper drainage secured. This is generally effected by a stratum of coal-ashes; but I have often had occasion to plunge plants where the remains of the ashes, turned up in digging, appear unsightly in the extreme: in these cases I drained the pots containing the plants by placing a small empty pot beneath each, and found the result so satisfactory, that I have adopted this plan wherever plants are plunged, it being free from every objection that applies to ashes. Pots are easier applied and removed, and more effectual, as by them worms are completely excluded. The plunging taking place when the pots required for drainage would be lying idle, they may be so applied without any sacrifice.

**Folkstone.**

On the Culture of the Calceolaria.—About the middle of July, when the plants have done flowering, preparation should be made for propagating the different kinds—the herbaceous, by dividing the roots; the shrubby, by cuttings. The plants should be encouraged in their growth, a short time previously to the operation, by judicious watering, the remaining flowers picked off, and the stems allowed to die down that no nourishment may escape. A little of the old soil should be removed, and a top-dressing of fresh compost added, in which the shoots will readily take root; those shoots that do not touch the soil require to be pegged down.

The cuttings from the shrubby sorts should be struck singly, in small sixties, in a frame with a gentle bottom-heat, kept shaded, and rather sparingly watered; when rooted, air may be more freely admitted, and the plants gradually hardened. As soon as the roots appear through the soil, they will require shifting into forty-eights, and to be placed in a house where they may receive plenty of top air—side air and drafts being prejudicial to the free growth of the Calceolarias when the sun bears considerable power the plants should remain on the shady side of the greenhouse; the temperature of the house should be from 45° to 50°.

About the beginning of September, those plants which are growing vigorously will require shifting into larger pots; and when large specimen plants are required, this operation should be repeated as often as the pots are filled with roots; liberal drainage should at all times be given, and regular watering carefully attended to, never allowing the pots to get dry. The decaying leaves should be removed, for if suffered to remain upon the plants, they cause mildew, and much injury ensues. The plants require to be frequently examined, to watch for the appearance of the green-fly: and when discovered, a check should be put to their increase by well fumigating the plants, and repeating the operation if the first is not effective, as it is difficult to dislodge these pests from the young and downy leaves. The house should be frequently steamed by damping the flues, as the Calceolaria thrives best in a moist atmosphere. During the winter months the plant must be removed to the south side of the house, to receive all the light possible, and prevent their being drawn up weakly. This treatment is continued till the beginning of March, when a gentle watering over the heads with a fine rose or syringe will prove very beneficial. As the power of the sun begins to increase, and the flowers approach their blooming season, it will be necessary either to shade the plants or remove them to the north side of the house; for if suffered to remain in the sun and allowed to become dry, the plants will be forced prematurely into bloom before obtaining a desirable height and size. When the flower-stems begin to rise, training should commence, and a stick put to each shoot that it may rise in its proper place, and assist in forming a regular head of bloom. A supply of liquid manure twice a-week will give additional strength to the plants, and cause the flowers to expand freely. The compost for the Calceolarias should be the following: one barrowful of loam, one of bog-earth, and one of cow-dung. For the winter potting an additional half-barrowful of bog-earth may be used, for which, in spring, a half-barrowful of loam should be substituted.—*Gardeners' Chronicle.*

Superb Carnations and Picotees.—As it is now the Carnation and Picotee season for planting, I here forward you a list of what I consider first-rate, and many of them new sorts, which have come under my observation on my visits to the different shows and collections of amateurs and florists in the neighbourhood of London during the past season. J. Bell.

*Scarlet Bizarres.*—Twitchett's Don John (not yet out), Headley's William Cobbett, ditto Achilles, Rainsforth's Game-boy, Roi da Capucins, Pugh's Haidee, Martin's Splendid, Barrenger's Fire-king, Smith's Duke of Cambridge, ditto Duke of Wellington, Ely's Regular, ditto Jolly Dragoon, ditto Lord Durham, ditto Earl of Mexborough, Wheeler's Victory, Grove's Sir Robert Peel.

*Crimson Bizarres.*—Holmes's Count Palini, Hufton's Duke of Wellington, Hogg's Champion, Paxley's Prince Albert, Roi Dagoberts, Barnard's Duke of Roxburgh, Ely's Duke of Bedford, ditto Lord Milton, ditto Duke of Manchester,

**Bucknell's Talma, ditto Charlemagne, Harvey's Huntsman, Barrenger's Enchantress, Veneбles's Spitfire, Wood's William IV., Young's Earl Grey.**

*Scarlet Flakes.*—Twitchett's Queen of Scarlets (not yet out), Simpson's Marquis of Granby, Barrenger's Hope, Woollard's Queen Victoria, Martin's Mars, ditto Phœnix, Willson's Sir H. Davey.

*Purple Flakes.*—Ely's Mango, ditto Mrs. Burkell, Hepworth's Elizabeth, Maasley's Euclid, Martin's President, ditto Lord Morpeth, Hogg's Colonel of the Blues, ditto Lady Chetwode, Willmer's Solander.

*Rose Flakes.*—Brooks's Flora Garland, Harvey's Maria, Ely's Lovely Ann, ditto Lady Ely, Pullen's Queen of England, Harrison's Lady Milner.

*Red Picotees.*—Meadley's Sarah (not yet out), Willmer's Duke of Cornwall, Orson's Queen Adelaide, ditto Eliza, Ely's Mrs. Homer, Barnard's Colonel Foreman, Giddings's Don John, ditto Teaser, Wildman's Isabella, Sharp's Duke of Wellington, ditto Unique, ditto Hector, ditto Beauty, Wood's Earl of Sandwich, ditto Queen Victoria, Holliday's Queen of England (not yet out).

*Purple Picotees.*—Giddings's Miss Hennell, ditto Vespasian, Wood's Lord St. John, Ely's Grace Darling, ditto Dr. Homer, Pullen's Lady Peel, Kirtland's Queen Victoria, Pluperfecta, Crask's Queen Victoria, Dickson's Trip to Cambridge, Brinklow's Hope, Heath's Superb.

*Rose and Scarlet-edge Picotees.*—Barnard's Mrs. Barnard (not yet out), Waine's Queen Victoria, Burrough's Sylph, Barrenger's Duchess of Bedford, Gidding's Diana, Garret's Lady Dacre, Sykes's Eliza, Millard's Fair Ellen.

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ON THE AMARYLLIS.—Having more than once observed directions in the CABINET for the cultivation of Stove Amaryllis, which are likely, if my experience be correct, to prove very injurious to them, I am induced to send a few remarks thereon. The point I allude to is the direction to re-pot them as soon as they show flower, or before they begin to grow. When first I cultivated Amaryllis I pursued this plan, to the destruction of many of my bulbs; and whenever I have recurred to it since, or seen it tried by others, the same effect, either of complete or partial decay, has followed. If Amaryllis be shifted into fresh pots, either soon after the leaves die off, or just before they begin to grow, the whole of the young roots perish, and decay so begun extends to the coats of the bulbs, forming a canker, which it is almost impossible to cure. The management which I recommend is invariably to re-pot such bulbs as require it when their foliage is in full vigour or still growing, say in June or July, or earlier, according to the treatment they have received. When the foliage dies at the tips, water should be gradually withheld, and the bulbs kept dry till the flower-buds appear. When the stem is half grown, water may be administered very moderately; but the plant should not have much till its leaves are six inches long. I find the very strongest loam, almost resembling clay, is best suited to these plants, and of course the pots should be well drained. As far as I have observed, most Amaryllis make root at the end of summer; and it is in the fibres thus made that the deposit of sap takes place to supply the future flower.

A. PETERSON.

POTTER'S LIQUID GUANO.—For the last three months I have applied Potter's Liquid Guano to my general stock of the best greenhouse plants, and their improved appearance is truly astonishing. I give it three times a-week, a very small proportion each time of watering.

AN AMATEUR GARDENER.

ON BANISHING ANTS.—I tried the plan of dusting common flour sulphur over ants with a view to kill them, but in this have failed; it, however, had the effect wholly to banish them, for, although I turned over the soil in the melon bed, and examined the neighbouring places not one ant could be found. I have tried it in several situations, and it invariably banishes them. It equally affects black and red ants.

P. M.

## ANSWER.

On Treatment of the Jacobæa Lily.—Plant them in equal portions of turfy loam and sandy peat, with a free drainage of crocks and rough pieces of turfy loam. After potting, place them in a frame, with a gentle hot-bed heat; when the flower-stem just makes its appearance, then remove them into a warm place in the greenhouse. If a portion be potted a little later in the season, they will succeed the others, and prolong the blooming season. A season of rest will be required from October to February. Withhold water after September 1st, and keep them dry till potting time in February. Conductor.

## FLORICULTURAL CALENDAR FOR MAY.

Tender or Stove Annuals.—When it is desired to have some plants to bloom late in autumn, as Balsams, Cockscombs, Browallis, &c., seeds should now be sown, and the plants potted off into small sized pots, as soon as they are large enough, using a rich soil.

Greenhouse.—During the early part of May, a few frosty nights generally occur; in consequence of which, it is advisable not to take out the general stock of plants before the middle of the month, or even, in cold situations, before the 25th. Whilst the plants however, remain in the greenhouse, let them have all the air that can be given, during the day, and at nights, if no appearance of frost. Particular attention will now be required to afford an ample supply of water to free growing kinds of plants. Frequently syringe them over the tops at evening, just before sun-set. If any of the plants be attacked with green fly, or any other similar insects, apply a sprinkling of tobacco water, diluted with water, by adding to one quart of the liquid five of water; in applying which to the plants, syringe them at the under as well as upper surface of the leaves: a repetition will rarely be required. This mode of destroying the insects is far preferable to fumigation. no injury being sustained by it, even if applied in a pure state. The liquid can be obtained of tobacconists, at 10*d.* or 1*s.* per gallon. Inarching Orange or Lemon trees may still be performed. It is a good time for increasing plants by cuttings, striking in moist heat. Greenhouse Annuals, as Salpiglossises, Globe Amaranthuses, Balsams, &c., should be encouraged by a little warmth, and shifted into larger pots, early in the month; so that the plants may make a show, to succeed the removal of the general collection of greenhouse plants. Cuttings or suckers of Chrysanthemums should now be taken off, if not done before. Achimeras coccinea, longiflora, rosea, &c., plants, should be potted singly into a light rich soil, and be forwarded in the stove, and repotted as they advance in growth, not too much at a time, but as root room appears necessary. Lobelias for the greenhouse should be similarly treated, as to potting, &c.

Flower Garden.—Continue to protect beds of Hyacinths, Tulips, &c. Carnations in pots should be encouraged by manure water, &c., in order to grow them vigorously: care in striking them will be required. By the middle of the month, half hardy annuals, as China Asters, Marigolds, &c., may be planted out in the open borders. Some of the best kinds may be potted, as done to the more tender sorts. Many kinds of greenhouse plants, as Petunias, Salpiglossises, Salvias, Fuchsias, Heliotropes, &c., should now be planted out in the open border. Dahlias that have been forwarded in pots, frames, &c., may be planted out towards the end of the month. Seedlings may be pricked out, in a warm situation, having a deep, fresh, rich soil. When Stocks, Mignonette, China Asters, &c., are wished to bloom late in the year, seeds may now be sown, either under a frame, or on a warm border. Slips of double Wallflowers should now be put in under a hand-glass. Seeds of biennials, as Sweet Williams, Scabious, Campions, &c., should now be sown. Tuberoses, for late flowering, should now be planted, either in pots or warm borders. Offsets of Campanula pyramidalis should be planted in rich soil, and placed in the greenhouse. Repotting must be continued till they cease to grow; by this means the plants will reach eight feet high, and be very branching.

In every previous Volume there are articles upon the Auriculas, Polyanthus, Carnations, Ranunculuses, Anemones, Tulips, Violets, Pinks, Heartsease, &c. We refer our readers to them, as affording directions and precautions valuable, especially at this early part of the season.

Gompholobium Hendersonii. 2 Rondeletia Longiflora. 3 Tu

Floricultural Cabinet Ju

THE

FLORICULTURAL CABINET,

JUNE 1st, 1845.

# PART I.

## EMBELLISHMENTS.

## ARTICLE I.

### 1. GOMPHOLOBIUM HENDERSONII.

This very beautiful Gompholobium has been introduced into this country by Captain Mangles, R.N., from the Swan River colony. It is not, like the well-known Gompholobium polymorphum, a climbing plant, but forms a neat evergreen bush, and blooms very freely. It deserves a place in every greenhouse. We saw beautiful specimens in the nursery of Messrs. Hendersons, of Pineapple-place, London, and was informed it blooms the greater part of summer, being very ornamental even in autumn too.

It requires to be grown in a turfy sandy peat, with a small portion of loam and leaf-mould, having a very free drainage.

### 2. RONDOLETIA LONGIFLORA. (Long-flowered.)

Messrs. Veitch and Son, of Exeter, introduced this beautiful flowering greenhouse plant from Brazil. It forms a very neat shrubby plant, much in the way of Bouvardia triphylla, and flourishes under a similar treatment. It is supposed to grow to a tolerably-sized bush, larger than the Bouvardias usually grow. The plant deserves a place in every greenhouse; its profusion of beautiful flowers render it an object of much beauty.

### 3. FUCHSIA, VAR. PICTA.

This is one of the immense quantity of seedlings that we raised, and it bloomed with us late in the season of 1844. The blossoms do not stand erect, as represented in our plate, but are, after the usual mode, pendant; the representation being thus given to suit our artist in arranging the three flowers to suit the size of the plate; the blossoms are larger, too, than the figure given. It is a free-flowering plant, grows vigorously, and is very distinctively pretty. Our plant had one or two entire self-coloured flowers, which added to its beauty in the contrast given. It deserves a place in every collection. We expect to have upwards of 4000 seedlings bloom during the present season; and, as we paid very special attention to intermix the various superior varieties, we doubt not but the results will afford us some valuable additions to the lovely tribe.

## ARTICLE II.

## AN EXTRACT ON THE CULTIVATION OF THE AMARYLLIS TRIBE OF PLANTS,

AS RECOMMENDED BY THE HON. AND REV. WILLIAM HERBERT, DEAN OF MANCHESTER, IN HIS EXCELLENT WORK ON THE AMARYLLIDACEÆ.

[SEVERAL correspondents having requested, in former numbers, some information on the culture of Cape bulbs, and having recently had the privilege of reading the very valuable work of the Dean of Manchester, on the bulbous tribe of plants, induces me to extract the following from the work, for the use of the correspondents referred to, and as a recommendation of the work itself, containing such a fund of valuable instruction on the subjects treated upon.]

### ON CYRTANTHUS.

"They are altogether plants of difficult culture, the bulbs being more disposed to dwindle and rot than to increase in bulk. Mr. Griffin was, I think, more successful than most others in the cultivation of C. obliquus, of which he had many strong bulbs on a shelf, very near the glass in his stove, when the heat was never great. A common greenhouse is usually too damp for it in winter, and the air of a hot stove too confined. A light soil, which is not retentive of water, will be found to suit the whole genus; and I think that the use of peat will always be dangerous to them. Those with persistent leaves should be cautiously watered in winter, the deciduous species not at all. C. carneus is one of the most difficult to manage; twice I lost it, notwithstanding the greatest care, and have at last succeeded in establishing one with better hopes, by giving it water but very seldom the first year, and rather more after it had formed a strong leaf, keeping it as much as possible in a draught of air in the greenhouse. It is planted in a mixture of white sand with a little light loam, with an open under drain.

"With respect to the other species, there is some peculiarity in the soil congenial to them which it is very difficult to analyse. When I lived at Mitcham, in Surrey, C. angustifolius was a weed with me, ripening seed freely; and the seedlings quickly came to a flowering age, and were vigorous, being potted in the soil of Mitcham Common, which was a light brown earth, with a little admixture of dead furze-leaves on a gravelly substratum. Since I lived in Yorkshire, I have been able to find no soil that suited it; and, although many changes were tried, the plants dwindled, and all perished; nor have I found any species of Cyrtanthus succeed well in the soils to which I have access here. Mr. Rollison had equal success with C. angustifolius, at his nursery at Tooting, near Mitcham. C. lutescens has, I believe, never been in Europe, but Dr. Burchell has many specimens of it. It has very narrow leaves, and comes very near to C. odorus, except in its colour, which is invariably a yellowish white. Ventricosus, figured by Jacquin, under the name Angustifolius, is only known to us by his plate and description. It was probably one of Mason's plants from the East Coast, and is allied to Collinus. Mr. Ker conceived that Jacquin had, by mistake, represented a scape of Spiralis, with the foliage of Angustifolius; but it is evident that his plant had not the inflorescence of Spiralis.

"The recollection that Hippeastrum equestre, single and double, which will not exist in the light soils to which I have access in Yorkshire, thrive exceedingly with me at Mitcham, in Surrey, in the same soil that peculiarly suited Cyrtanthus angustifolius, and that all the Cyrtanthiform bulbs are disposed to rot in light earth at Spofforth, persuades me that when their cultivation is found difficult, a soil that is more disposed to set firm, and not fall to pieces when turned out of the pot, should be substituted, with good drainage and cautious watering. The difficulty is to find a light soil which has a little tenacity. There is a yellow earth of that nature, in which I have observed Erica cinerea thrive with much greater vigour than in any black soil, in the neighbourhood of the New Forest, which would perhaps suit the Cyrtanthi. In a soil of that nature all Mr. Woodford's Ericæ were cultivated at Rickmansworth. The earth of Mitcham Common was so congenial to the Ixias, that in it I have had seventy-two flowers from one bulb of Ixia longiflora, and nearly as many from one of Spiraxis grandiflora; whereas, the confluent soils of this neighbourhood, though favourable to the hardier Gladioli, destroy the Ixias and Babianas, and are not favourable to Sparaxis.

## ON HIPPEASTRUM.

"There is some difference as to the cultivation of the various species of Hippeastrum, in consequence of the several latitudes, altitudes, and situations in which they are found. Capricious watering is their bane; they should be watered pretty freely while they are making leaves, more sparingly after they are grown, and not at all when at rest. Aulicum I have found very difficult to manage; I have had but two or three roots of it, and have not been satisfied with their treatment. Calyptratum flourished well with me in light soil on the hothouse flue, growing all the year round, till I was told by a gentleman that they had been found to succeed better in the greenhouse; and, having transferred them according to his advice, I lost all my bulbs of that species. Psittacinum, and the beautiful mules between it and Regio-vittatum, are hardy greenhouse plants, requiring absolute rest in the winter, and flower freely in the spring; they grow weak in the stove, and will not flower without rest. Solandriflorum and Stylosum are tender stove plants, but should rest in winter time. Vittatum is a greenhouse plant, requiring rest in winter, and may be brought into the stove in spring to flower it. In Surrey it lived well, flowered yearly, and sometimes ripened seed in the open ground near the south front of my house, a small heap of ashes being thrown over it in winter. The mules between Psittacinum and Vittatum would perhaps bear as much exposure if the wet could be kept from them in winter. Reticulatum and Striatifolium are tender stove plants, and I believe the former is nearly lost, and its habitation has never been exactly ascertained. Of latter years the striped-leaved variety has been frequently sent from Brazil, but the original plant has not been met with. The mules between Striatifolium and different varieties of Bulbulosum, as well as Regium and Regio-vittatum, have a hardier constitution; and many of them come so near to the reticulated parents, that they will be preferred in cultivation for ornaments. Equestre is a plant of singular constitution, and frequently lost in the stoves; though a native of the hottest regions of the west, it will not live if watered constantly in the stove. It requires absolute rest in winter, in a moderately cool but not damp situation. It will flower early in the summer, and after flowering should be placed in the greenhouse, or in the open air, where it will grow better than in the stove.

"Regium requires less care, the stove, and rest in winter. The whole family of Bulbulosum, except crocatum, are easily managed. By giving them two periods of rest, in winter and again at midsummer, they, as well as the mules Regio-vittatum and Rutilo-regio-vittatum, may often be made to flower in the spring and autumn. I have found great advantage, with bulbs that were to stand on a hot flue, in placing under them a shallow tray made of tin or zinc, and nearly filled with sand. In pursuance of this system of encouraging their growth by moist warm sand underneath, a gentleman to whom I had given several tender bulbs informed me that he had constructed a pit for them, with a chamber, into which was introduced a slender steam-pipe, perforated with small holes; and the chamber was covered with hurdles, over which he placed a layer of brushwood, and on that a body of sand, in which the pots were plunged. The steam worked its way through into the sand, and kept up a moist warmth, which was very congenial to the tender bulbs during their season of growth; and I do not conceive that any better mode of cultivation could be adopted. A bed of the various splendid Hippeastra, successfully cultivated in a low warm house, would exceed most vegetable displays in beauty. Some of the varieties of H. bulbulosum, if not all, may be found in South America, growing in black vegetable earth. My collector found Pulverulentum in such soil with the scape three feet high, and the leaves long; and I discovered Equestriforme growing unperceived in a mass of parasitic plants, Cereus and Pitcairnia, which had been torn off a stem or the face of a rock. I have, however, lost so many bulbs by the use of peat at various times, that I am generally fearful of using it. There is so much variety in the vegetable black earth of different places, that it should be tried cautiously. I have been told that H. calyptratum has been found growing on the branches of trees, and that it has been necessary to shoot off the limb by repeated discharges of a gun, in order to get the bulb; and I have seen it grown in a pot of moss. The principal causes of the sickly state of Hippeastra, in cultivation, are too light a soil, want of water when the leaves are pushing, and too much water after. I have observed them grow with unusual vigour in a split or broken pot, in consequence of better drainage. The finest bulbs I ever saw were two self-sown seedlings from a cross-bred plant, which established themselves in the pot where Convolvulus gangeticus was growing. They killed the Convolvulus, and at last broke the pot, and have not been so vigorous since. In consequence of its falling to pieces, it became necessary to shift them. It is evident that good drainage is essential to their health. With earth that sets firm, that object may be effected better by a single crock placed carefully so as to cover only part of the hole, than by many, of which the lowest covers the aperture, and the remainder become choked by the earth settling amongst them. I have had seedlings of crosses with Vittatum, which sent up two stems of blossoms from a pot scarcely twice the size of the bulb. A self-sown seedling established itself in one of my stoves, and is growing freely on a stump of wood, into the cavity of which a little peat had been thrown to encourage the growth of a Pleurothallis; and I do not doubt the bulbs being often found on old trees, amongst the ferns, and other parasites; but I consider a well-drained rich alluvial soil to be most fit for bringing them to perfection. They appear to have gone rather out of favour lately with cultivators, probably from failures through mismanagement, for certainly they can be surpassed by few flowers in beauty, and most of them may be cultivated in a warm greenhouse, if they are kept quite dry in the winter; but it should be always remembered that very tender bulbs, which are to be kept dry in a greenhouse, will rot if above ground, from the dampness of the atmosphere, though they would have been uninjured if closely covered by light earth.

"It is now pretty well understood that, although cuttings of Camellia Japonica strike root readily in sand, a light and confluent soil is fatal to the growth of the plant, causing the young leaf to turn yellow, become spotted, and fall off, especially if exposed to the sun, a well-drained stronger soil being essential to their health. Most sorts of Hippeastrum seem to me liable to suffer from the same cause, which is apparently too rapid evaporation of the moisture which they require. The more frequent watering, which becomes necessary to the development of their leaves, occasions the decay of the fibres. Due attention to this point will make the cultivation of the bulbs of this genus easy to those who have been unsuccessful in their treatment, always bearing in mind that the stronger the soil used the more perfect should be the drainage. Strong loam and a cool situation, with complete rest in winter, suits H. vittatum, and I believe that Aulicum will succeed best with the same treatment. I consider that Hippeastrum generally does not thrive well in soil which is powdery when dry, and does not set."

This work we warmly solicit those of our readers who desire to improve or extend their knowledge of bulbous plants to purchase, being perfectly convinced that another so well calculated for that purpose cannot be found. Looking over the genus Crinum, we observe a variety named Careyanum, on which the author has the following lines, which we extract for the purpose of laying before our readers some account of that eminent man, in memory of whom the above variety of Crinum is named, and to whom the succeeding remarks relate. "This beautiful plant was brought to light by Dr. Carey, late of Serampore, and I had the pleasure of naming it after one of the best, the most amiable, gifted, and indefatigable of men, whose virtues and talents adorned his country, and whose labours have promoted the glory of the Almighty. I never saw this excellent man, but fifteen years' correspondence had accustomed me to look upon him as a deeply-valued friend. His life was devoted to the diffusion of the gospel; horticulture, natural history, and botany, afforded the brief recreation he allowed himself from his daily toils, His favourite plants were the Amaryllidaceous family, and to him we are indebted for our knowledge of many of them. He was born in 1761, at Hackleton, in Leicestershire, and embarked for India in 1793. In 1800 he was settled at Serampore, and he closed the labours of his useful life in 1834, beloved by all who knew him, honoured by all whom his name has reached, having translated and superintended the publication of the gospel in forty oriental languages, which he had the perseverance to acquire for that purpose. Born in the humblest circumstances, often uncertain of his daily bread, at first a journeyman shoemaker, then a village schoolmaster, he had, before his departure from England, taught himself to read the Bible in Greek, Latin, Hebrew, French, Italian, and Dutch, and had become conspicuous by his eloquent preaching and his ardent desire to bring about the mission to India, which originated in his powerful mind. When he arrived there, he found it necessary to offer his services, by a hand-bill, to make or repair shoes; and, after he had risen to the head of a flourishing establishment, and occupied the chair of three professorships, he was not ashamed to nail up the original hand-bill against the wall of his study, but took pleasure in considering from what an humble grade he had been lifted up to a more useful and distinguished station by the grace of God and his own virtuous perseverance."

## ARTICLE III.

## ON THE CULTURE OF BROMPTON STOCKS.

BY A FLORIST.

THE entire race of Stocks are plants I much admire, and there is not a kind, I believe, of these which thrive in the open air of this country but I possess. I am more especially partial to the Brompton Stocks, and they very deservedly stand in high repute, producing by proper management spikes of flowers two feet long, and each separate blossom two inches in diameter. In addition to their splendour and fragrance they bloom during all the summer season, and are among the finest ornaments of the flower garden, their various colours grown in contrast producing a fine effect.

This season I have blooming plants of the following kinds:—

1. The best way of propagation is by seeds, and unless some little attention be paid to the selection of the seed double flowers will very rarely be produced. Always collect the seeds from such plants as have semi-double flowers, or which grow in the immediate neighbourhood or are surrounded by double ones; for although double ones have no power to produce seed themselves, and it has been disputed whether they can impregnate others, yet it has been always found that plants raised from seed gathered in such situations have amongst

them a greater number of double ones than when the seed-bearing plants grew under different circumstances.

2. The best time for sowing is the beginning of May. This should be done on a border of light sandy soil prepared for the purpose, on an eastern or south-eastern aspect; never on a south aspect, as this would be too hot for them. Of all other modes the best is to sow the seeds in shallow drills, six inches apart, scattering the seed very thinly.

3. Water as often as they require it, but never do this in the middle of the day, when the sun is hot, for the plants would be liable to be damaged by the sun, rendering the drops of water hot, and thereby scalding the leaves, which, if it did not entirely destroy them, would greatly retard their growth. The best time is either very early in the morning, or towards five o'clock in the evening, when the sun's rays are oblique.

4. When the plants are nearly three inches high they should be thinned out to six inches apart in the rows, and afterwards to a foot, taking up every other row; and those plants taken out should be transplanted carefully into a similar border as that prepared for the seed-bed, or be planted three or four together in the flower borders; the former plan is the best, if it is convenient, because the whole are more easily protected through the severity of winter. In either case they must be taken up with balls, and be sheltered from the sun, and regularly watered, until they have begun to grow again. Those left in the seedling bed will be much finer plants in the autumn than the transplanted ones, from the circumstance of having received no check in removing, which, from having so small a quantity of fibrous roots, prevents their growth for some time.

5. On the approach of winter the borders may either be hooped over, and be covered with mats in severe cutting weather, or a frame may be set over the plants, and the glasses put on to preserve them. If they are left entirely exposed, if the plants are not killed, the long leaves will be beat to pieces by the winds, and the naked stalks, at the approach of spring, will be very unsightly. Those planted in patches in the flower borders may be protected by branches of spruce fir, stuck into the ground round them, in the absence of other shelter.

6. In March, if the weather be fine, or if not early in April, take

them up with as large balls as they can be got, and plant them in the situations intended for them in the flower borders. Early in June they will come into bloom, and will more than repay for all the care taken of them.

## ARTICLE IV.

### REMARKS ON PLANTING OUT PELARGONIUMS, VERBENAS, SALVIAS, &c., INTO THE BEDS OF THE FLOWER GARDEN.

BY A LADY AMATEUR GARDENER.

Now that the season is fast approaching for putting out into the flower-garden Verbenas, Geraniums, Salvias, &c., I am inclined to offer the following hints to my sister gardeners, and though many of them may have already adopted my method, to some it may still be a novelty. When scarlet Geraniums are put out of the pot into the flower-garden they present a most gay and beautiful appearance; if laid quite flat, and pegged down at the joints, the branches very quickly turn themselves upwards, and in a very few weeks the bed is a complete carpet of green, thickly studded with the brilliant scarlet flowers. I have adopted this plan for the last two years, and nothing could exceed the beauty of my Geranium bed. There are also considerable advantages gained by pursuing this system; the plant is not liable to be broken by the wind, and as they strike root nearly at each place where they are pegged down, a great increase of plants is gained by cutting the branch close to each root when the season comes for re-potting them.

The same plan may be pursued with the Salvia, and by intermixing the Salvia patens with the other the blue and the scarlet produce a most brilliant contrast, and at the same time a harmony of colouring which can hardly be surpassed.

[We hope our Correspondent will favour us with other communications.—CONDUCTOR.]

## ARTICLE V.

### ON THE CULTURE OF CLIANTHUS PUNICEUS, AS A STANDARD PLANT.

BY CLERICUS.

THE Clianthus Puniceus is well worthy of a place in every collection, both for its beautiful foliage and pendant racemes of red flowers.

When grown as a standard, it far surpasses in beauty and elegance any plant I have seen of its kind: I shall mention a few words regarding its culture as a standard. Select cuttings from a plant about the beginning of May or June; the cuttings should not exceed four inches in length, and taken from the same year's growth; recollect that the extremity or point of the cuttings must not be pinched off. After making the cuttings, allow them to remain for a day or two before potting, to dry some of the superabundant moisture from them, which is an advantage gained by the cuttings rooting two days sooner. A 32-sized pot should be filled with white sand, and the cuttings inserted therein to the depth of two or more inches; they will strike readily in a heat of 70 or 75 degrees; if they are covered with a bell-glass the strike will be more successful. After struck they should be potted off separately, in thumbs or small sixties, amongst a compost of sand, leaf, loam, with a little well decomposed cow-dung all well incorporated together; when potted they should be placed in a bottom heat till they have matured roots enough to support themselves. Then they should be removed to a more airy situation, either to a greenhouse or conservatory, and great care and attention must be paid to the re-potting and watering, or without the plants will soon form a sickly, stinted appearance. For to make good standards all side-shoots must be pinched off as soon as they appear, training the plant up with a clear stem to the necessary height required; then, after they have attained the required height, the tops should be pinched off, and that causes them to throw out laterals, and these laterals again stopped makes them still to throw out the more, till at last the plants attain a most luxuriant head, richly decorated with thick but dense pale green foliage. When treated after the above method that I have laid down, then planted out in a conservatory amongst good rich mould, one-half fresh loam, one-quarter leaf mould, and one-quarter decomposed cow-dung, along with a little vegetable mould and sand; all these to be well incorporated together, and a pit made for the reception of the plants, three feet square by two and a half deep, filling it up with the above composts, then insert the plant, putting it about an inch deeper than it was in the pot; then there should be a stake of durable wood procured to fasten it to. When planted out it grows more luxuriant than in pots, and has always a more healthy appearance. When in flower, what can surpass it? the bunches of pale red flowers hanging the one upon the other out of a dense thicket, as it may be termed.

# ARTICLE VI.

## REMARKS ON THE CULTURE OF CALCEOLARIAS.

BY A LONDON AMATEUR GROWER.

I HAVE been a cultivator of the very lovely tribe of flowers, the Calceolarias, but have encountered a good deal of difficulty in my attempts to grow them well. Determined, if possible, to succeed, I visited from time to time the establishments of the most successful growers who exhibit such fine specimens as is shown at the London shows, in order to ascertain the method pursued. The result of my inquiries and observations is, that the plants require to have a *very free* drainage of broken pot and rough pieces of turf. A compost as follows,—equal portions of well enriched turfy loam, with a moderate sprinkling of white sand in it, and the other half well rotted leaf mould, these materials not to be sifted, but be in what is termed a chopped or rough state. The plants are placed in an airy situation, and where they can be near to the glass, and have a free circulation of air. Generally they are kept in the greenhouse, and special attention is given to watering, taking care the plants do not lack moisture, but never be given so as to be saturated, and that they are not allowed to be droughted. The pots they require is in proportion to the size of the plants, care being paid that they are not over-potted, as when they are they generally get over watered, turn yellow, and soon die.

The period immediately succeeding the blooming of the plants I have found precarious with them, but the best method is as soon as possible after blooming cut off the flower stems of the plants intended to produce stock for future supply, and carefully re-pot by shifting them into a size larger; keeping the ball entire, and placing the plants in the light and near glass, also having a free air, but where they can be shaded from powerful sun. Thus treated they soon push, and a supply of shoots or offsets is afforded, so that cuttings, &c., will readily be struck early in the summer, and furnish young plants in a state of vigour to survive the effects of a winter's trial.

# ARTICLE VII.

## OBSERVATIONS ON A HOUSE FOR ERICAS.

### BY AN AMATEUR GROWER.

HAVING remarked in some former volume of the FLORICULTURAL CABINET that Ericas were grown admirably in frames, elevated in the summer season by a brick or two at each corner, admitting a current of air among the plants, I had a house constructed to answer the same purpose, as follows :—

In situation it stands due East and West. It is a double roofed one, having an elevated floor up the middle of the house, brick walls three feet and a-half high, and the space inside filled up with brick and lime rubbish two feet, and the remainder with coal ashes, the surface being finest. This forms an even surface, and the nature of the materials are very congenial to the growth of the plants, being just cool enough for the roots, without having the injurious striking cold that I have observed in some places of a stone floor to stand upon. I have a walk round the centre thus prepared bed, and on each side I have a similar formed bed a yard broad, the surface being on a level with the centre bed. The bottom of this is supported by piers half a yard high, and underneath the same, up the middle, is hot water pipes, the side being open to allow the warmth to enter the house, and there being a cavity four inches wide between the exterior wall of the house and the front pit-wall, the warmth from the hot water-pipes ascends thereby into the house so as to preserve the plants thus placed at the sides of the house from being damaged by frost. Only as much warmth is required as will just protect therefrom, more is injurious. The roof is only just high enough to allow a tall person to walk up the path without his hat touching the rafters. The erect sashes at the sides are two feet deep, and made so that hanging upon hinges air can be admitted by every one, and when required a regular current through the house. Of course I have my tallest plants on the centre bed, but all my specimens are very bushy, and dwarf of their size. They flourish admirably in this house, and the plan is well deserving to be adopted for the successful growth of Heaths, and glass and timber now being so cheap ought to be provided, where this class of so lovely a tribe are grown.

## REVIEW.

*The Lady's Country Companion, or, How to enjoy a Country Life rationally. By Mrs. Loudon, author of "Gardening for Ladies, &c."* With an Engraving on Steel, and Illustrations on Wood. London, Longman and Co., 1845.

THIS is a very interesting addition to the previous useful and pleasing publications which have been sent forth to the ladies of our country by Mrs. Loudon, and which we very cordially recommend to our readers upon its own merits, and additionally so, as the procuring of it will be an act of benevolence, by contributing towards the support of the author and family of our late valuable and much respected friend, J. C. Loudon, Esq.

The volume is divided into six Books, or Parts. The first is, *The House;* the second, *The Garden;* the third, *Domestic Animals;* the fourth, *Rural Walks;* the fifth, *Country Amusements;* the sixth, *Country Duties.* The volume is 12mo, and contains 396 pages. Each subject is treated upon in a Letter. Of course we are best acquainted with the gardening subjects which are treated upon. The following extract (Letter 7) will give our readers a fair specimen how each particular subject is treated:—

"It gives me great pain, my dear Annie, to find that you still think that you shall never like the country so well as town. I do not, however, despair; for I am convinced that you do not at present know whether you shall like it or not. The pleasures of the town and the country are, indeed, so different, that it requires some time to become accustomed to the change; but when you are sufficiently well acquainted with country pursuits to take an interest in them, I am sure you will never feel any want of the pleasures of the town. The great secret of being happy is, to be able to occupy ourselves with the objects around us, so as to feel an interest in watching their changes; and, when you can once do this in your present situation, you will no longer complain of dulness or want of excitement. To be convinced of the truth of what I say, you need only remember the pleasure your friend Mrs. P. C. takes in the cultivation of her garden; the interest with which she watches the opening of her flowers, the coming up of the seeds she has sown, and the growth of the trees she has planted. It is not the positive beauty of these things that occasions the pleasure she experiences in watching their changes, but the interest they have created in her mind; for the entomologist will find pleasure in the most hideous caterpillars, and the geologist will pass whole days delightfully among barren rocks. All that is wanted to give an interest in any subject is, a sufficient degree of knowledge respecting it to be aware of its changes, and our own natural love of variety will do the rest.

"It is a great advantage in a country life, that its principal objects of interest must be found at home; and hence, as home is woman's peculiar dominion, the noblest and the best feelings of the female heart are more likely to be called into action in the country than in the town. In youth, especially, the ameliorating effects of country pursuits will soon be perceptible, both morally and physically; and your health, which has always been delicate in a town will, I have no doubt, in the country become positively robust. As the first step towards the attainment of this desirable object, let me recommend to you to have a flower-garden laid out as near the house as possible. I should like to have those cedars, the remainder of those gloomy firs, cleared away, which I see close to your house in your sketches, and your flower-garden so placed that you could step into it at once from the windows of your usual sitting-room. I will hope that this may be the case; and as I am most anxious that you should have a flower-garden to interest you as soon as possible, and as I must have a *locale* to make my descriptions understood, I will proceed to give you some hints as to the laying out and planting of a garden in the warm and sheltered corner under the southern window of your morning room.

"In the first place, it will be absolutely necessary that the remainder of the trees should be not only cut down but grubbed up; as it will be quite impossible for any flowers to grow under the shade of tall thick trees, and leaving the roots would prevent the possibility of digging the ground. In other respects the situation is admirably adapted for the purpose, as it is open to the south and south-east, and protected from the north and north-west. Supposing the Scotch pines and cedars to have been cut down, their roots to have been grubbed up, and the ground to have been dug over and levelled; the next thing is to determine upon the plan for the garden. I think it should certainly be a regular geometric figure, and planted in masses, each bed containing flowers of one kind, so as to produce something of the effect of a Turkey carpet when looked down upon from the windows of the house. I enclose you a design which I think will suit the situation, and I will adapt what I have to say to it, as my observations might easily be made suitable to another plan, if another should be found more desirable.

"We will suppose the plan to consist of twelve flower-beds on grass, with a gravel walk round, which may be bordered on the side next your room by beds for flowers, with little gravel openings opposite each of your windows, or be plain gravel, as you like. There may be a conservatory into which the drawing-room windows facing the south may open, and on the other side there should be a shrubbery to unite it with the lawn. In the centre of the flower-garden there may be a fountain. As the flower-garden is to be seen principally from your windows, the beds nearest you should be planted with dwarf flowers, so that those in the back beds may be seen; and I should advise the shrubbery behind to consist of laurustinus and arbutus, so as to afford a handsome green background to the flowers in summer, and yet to afford a few flowers themselves in winter and spring, when flowers are scarce in the beds.

(*To be continued.*)

# PART II.

## LIST OF NEW AND RARE PLANTS.

**GRANDIFLORA. LARGE-FLOWERED.** (Pax. Mag. Bot.) We recently figured the handsome Allamanda cathartica, but the present species is even superior to that, although the flowers are similar in colour, those of A. grandiflora are much larger. It is a native of Brazil, and was discovered by Mr. Gardner, who sent it to the nursery of Mr. Cunningham, Comely-bank, Edinburgh. It is an evergreen climbing plant, well deserving a place in every warm greenhouse conservatory, or plant stove. It has bloomed finely in the gardens of Colonel Baker, of Salisbury, under the skilful management of Mr. Dodd.

**ANGRÆCUM APICULATUM.** (Bot. Mag. 4159.) Orchidaceæ. Gynandria Monandria, a native of Sierra Leone, introduced by Mr. Whitfield into this country in 1844. The flowers are produced on a drooping raceme of near a foot long. The flowers are white, with a tinge of pink at the ends of the petals. Each blossom is about two inches across.

**BEGONIA RAMENTACEA. THE SCALY.** (Pax. Mag. Bot.) A native of Brazil, introduced into this country in 1840, and is now to be had in several of the London nurseries. It is an evergreen perennial. The leaves are a bright green above, and pink-red beneath. The flowers are of a pale blush, and white intermixed. It is one of the prettiest species, well deserving a place in every stove.

**Calceolaria alba.** White flowered. (Bot. Mag. 4157.) Scrophularineæ. Diandria Monogynia. A native of Chili, from whence Messrs. Veitch's, of Exeter, received it, and with whom it bloomed last year. The plant is an half shrubby one, growing erect, branching, leaves about two inches long, and an eighth of an inch bread. The flowers are produced in large terminal branching panicles, of a pure white.

**Corræas. Gaines' Seedlings.** (Pax. Mag. Bot.) Rutaceæ, Octandria Monogynia. Mr. Gaines, Florist, of Battersea has been very successful in raising several very handsome varieties of this lovely tribe of autumn and winter flowering plants. The kinds here figured are,—

**Picta.** A rosy-crimson tube, with a bright green end. The flower is near an inch and a half long.

**Rubescens.** The entire of the flower is a deep rosy-crimson, rather longer than Picta.

**Delicata.** The flower is about half an inch long, tube very broad, and the mouth of the flower spreads much. The colour is a pretty pink.

**Ferruginea.** The flower is about an inch long, of a sulphur-yellow; the ends being of an orange colour.

**Pallida.** The flower is of a pale sulphur, about an inch and a quarter long.

**Picta** was raised between *virens* and *speciosa*.

**Rubescens** was raised between *speciosa* and *Lindleyana*.

**Delicata** was raised between *alba* and one of the deep coloured.

**Ferruginea** was raised between *alba* and *Grevillia*.

**Pallida** was raised between *alba* and *rufa*.

**Dendrobium fimbriatum var oculatum. The Fringe-lipped, dark-eyed.** (Bot. Mag. 4160.) Orchidaceæ. Gynandria Monogynia. A native of Nepal, which bloomed the first time in this country in the Liverpool Botanic Garden. It has since bloomed in the royal gardens at Kew. The flowers are of a rich golden-yellow, with a dark blood-coloured eye-like spot on the centre of the Labellum, which adds greatly to the beauty of this otherwise very charming plant.

**Goodenia grandiflora. Ovate-leaved.** (Bot. Reg. 20) Goodeniaceæ. Pentandria Monogynia. A native of New Holland or New Zealand. It is a perennial, herbaceous, greenhouse plant. The flowers are yellow, with a few streaks of red. They are powerfully fragrant, very similar to the orange blossom. Each flower is about an inch across.

**Jasminum affine. Kindred Jasmine.** (Bot. Reg. 26.) Jasminacea. Diandria Monogynia. Dr. Lindley considers this the wild officinal Jasmine. It differs in very little, and would, under ordinary circumstances, be deemed a mere variety with pink-tubed flowers. It is quite hardy. Each blossom is about an inch across. It is grown in the garden of the London Horticultural Society at Chiswick.

**Lupinus ramossimus. Branching Lupine.** (Bot. Reg. 25.) A native of Chimboraza. Seeds of it were sent by Mr. Hartweg to the London Horticultural Society, in whose garden it has bloomed. The flowers are blue and red, having the delightful fragrance of the sweet pea. It is a shrubby species.

**Peristeria Humboldti, var. fulva. Humboldt's Dove Flower, tawny flowered.** (Bot. Mag. 4156.) This very noble flowering orchideous plant is a native of Venezuela, discovered by Humboldt. It bloomed for the first time in this country in the collection of G. Barker, Esq., Springfield, near Birmingham. The flowers are produced on a raceme of about two feet long; they are numerous, fleshy, of a tawny-yellow colour, sprinkled over with an immense number of purplish-brown spots. Each flower is about three inches across. It is a noble plant, and well deserves to be in every collection.

**Salpixantha coccinea. Scarlet-Trumpet flower.** (Bot. Mag. 4158.) Acanthacea. Didynamia Angiospermia. Mr. Purdie, botanical collector for the royal gardens at Kew, discovered this pretty flowering plant in Jamaica. It has bloomed in the stove at Kew during last autumn, and through winter. It is a low branching shrub. The flowers are produced in terminal spikes, trumpet-shaped, of a bright red outside, and white inside. Each flower is an inch long. It is very neat and pretty.

**Echeveria Scheerii. Mr. Scheer's.** (Bot. Reg. 27.) Crassulaceæ. Decandria Pentagynia. A native of Mexico, introduced into this country by F. Scheer, Esq., of Kew. It is a greenhouse plant, blooming in winter. The flowers are produced in a long panicled raceme, pale red and green.

**Stanhopea Bucephalus. Bull-horned Stanhopea.** (Bot. Reg. 24.) Orchidaceæ. Gynandria Monandria. It is a native of the woods of Paccha, found by Mr. Hartweg. It has bloomed in the collection in the Chiswick Gardens. It is one of the finest and rarest of Stanhopeas. The flowers are produced on an erect stem, each blossom being about four inches across, of a rich bright golden colour, spotted beautifully with dark purple. They are deliciously fragrant.

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## Plants noticed in the Botanical Register, not figured.

**Begonia stigmosa.**—At Messrs. Loddiges's. The flowers are white, produced in cymose panicles.

**Dendrobium anosmum.**—Messrs. Loddiges's obtained it from the Phillippine Islands. Its blossoms have much the appearance of D. macrophylla; they are scentless. It is a remarkable variety.

**Epidendrum rufum.**—It was sent to the collection of Sir Charles Lemon, Bart., at Carclew, from Rio. It has bloomed at Sir Charles's; the flower-scape rises about half a yard high, bearing a profusion of brownish-yellow flowers.

**Spiranthus lobata.**—A native of Mexico. The scape rises about half a yard high, having about a dozen of yellowish-green flowers. It is in the collection at Carclew.

**Galanthus reflexus.**—It was found on Mount Gargarus, by Mr. Lander, who sent it to the Dean of Manchester. The flowers are white, about half the size of the common Snowdrop.

**Odontoglossum membranaceum.**—This very handsome species has bloomed at Messrs. Loddiges's. The flowers are pure white, large, and margined with deep rose colour. They have the scent of bitter almonds.

**Oncidium gallopavinum.**—A native of Mexico. Sepals and petals greenish, stained with purple crimson. The lip is yellow.

**Cattleya papeiansciana.**—It appears to be a variety of C. Loddigesia.

**Befaria glauca.**—A native of Venezuela; discovered growing on the mountains. It there arrives at the height of 15 to 20 feet, being a companion to the Vaccineums, Gaultherias, &c. It appears to belong to the Ericeæ, and blooms nearly all the year, resembling a fine Azalia.

## Plants seen at Nurseries, &c.

### *At Mr. Lowe's, of Clapton. In the Stove.*

**Begonia maniculata.**—The plant is very branching, and the flowers a pretty delicate blush-pink.

**Begonia peltata.**—The leaves are very large and a hoary-white. The panicled heads of flowers are very large; green and white.

**Sidophyllum longifolium.**—The foliage is singularly pretty, being arranged as in nine rays from a common centre.

**Pavetta Borbonica.**—The leaves are tolerably large, of a deep rich green, spotted numerously with bright yellow, the midril being of a deep red colour. The contrast of the whole produces a very pretty effect.

**Laurus pumeo.**—It has a fine oval-shaped evergreen leaf, and is said to be hardy, having been discovered on the same locality as Araucaria imbricata. If it proves to be so, it will be a very valuable addition to our out-door ornamental trees or shrubs.

**Tradescantia Zebrina.**—The foliage is very pretty, of a deep green with bright silvery stripes. It is a trailing plant.

### *At Messrs. Loddiges's.*

**Spirea Reevesi.**—A pretty hardy shrub, producing fine clusters of white flowers.

**Phælanops amabile.**—In fine bloom. Each flower about four inches across; white, with the tip tinged with yellow and pink.

**Dendrobium macrophyllum.**—White, with the lip inside of a deep velvet; very beautiful in contrast. There are four varieties of this species in the same house.

**D. pulchellum** var. **purpureum.**—Blush, with purple and yellow; a very distinct variety.

**D. pierardi.**—Pale blush, with a greenish-yellow labellum.

**Œnetochilus setacea.**—The leaves are most beautiful; the deep velvet in contrast with golden veins. There are two other new unnamed species, having an equally beautiful foliage.

**Leptotes bicolor.**—White, labellum purple, with white tip.

**Pavetta Borbonia.**—Some fine specimens of this handsome leaved plant.

**Echites nutans.**—A new species of this fine genus, not yet bloomed.

**Cerbera fruticosa.**—The flower is much like a Phlox in form, about two inches across; blush, with a crimson eye. A pretty hot-house plant.

**Gladiolus gracilis.**—Having sky-blue coloured flowers. Greenhouse.

**G. hirsatus.**—Pink with white centre.

**Mirbelia speciosa.**—The flowers at first are a deep purple and change to white. A pretty pea-flowered plant for the greenhouse.

**Eriostema scabra.**—The flowers are produced numerously in spikes, white.

**E. cuspidata.**—In large spikes, white tinged with rose.

Mr. Lowe has raised some of the most beautiful seedling **Camellias** we have seen.

No. 1, **Lowe's Jubilee.**—The flower is near six inches in diameter, equal to C. reticulata; it is nearly double, having seven tiers of petals: although it shows a centre of stamens, they are of such a bright yellow, as to be so beautifully distinct, as to add to the fine effect; the petals are of fine form and substance, regularly arranged, of a beautiful peach-rose colour, altogether rendering it one of the finest in this country, and deserving a place in every collection.

No. 2, **Lowe's centifolia.**—This is a most beautiful distinct flower, being as double as the Cabbage Rose in its best form, and of a rich rosy-crimson. Like the other, it deserves a place wherever it can be grown.

### *At Messrs. Chandler's.*

**Hybrid Rhododendrons, Smithi-Chandleri.**—Rich purple-crimson, with numerous dark spots.

**R. venustrum.**—Deep purple, rosy centre, neatly spotted with dark.

**R. conspicua.**—Lilac-purple, light centre, prettily spotted with black.

**Corrœa speciosa-ventricosa.**—Tube bellying, bright crimson; about one-third of it a deep green.

**C. bicolor.**—Blush with white end. The plant has been in bloom the entire of two years.

**Chorozema Chandleri.**—A dwarf variety, a very profuse bloomer, and the flowers large and distinct in colours. It is the best of the varieties we have seen.

**Epacris Atleeana.**—The flowers are of a very pretty flesh colour.

**E. coccinea.**—This new species was in vigorous bloom, the flowers are of a bright-carmine colour, very pretty.

E. ELEGANTISSIMA.—The flowers are of a bright pink-crimson outside and blush inside. The end of the tube is deeply notched.

*The following Camellias were of the finest form:—*

C. Colvilli—white, rose stripes. C. eximia-coccinea—very compact and double. Duchess of Orleans—white striped with bright red. Very double, compact, and beautiful, one of the best grown. C. Leeana superba—fine crimson, very double. C. Brucea—large, rich red; petals of thick substance. C. Chandleri-elegans—large, fine, rosy-blush. C. imbricata-alba—white with pink stripes. C. corallina—rich deep red; a very late flowering variety. C. King—white with pink stripes, very double.

(*To be continued.*)

# PART III.

# MISCELLANEOUS INTELLIGENCE.

## QUERIES.

ON ERYTHRINA LAURIFOLIA.—I have kept a plant of the above in a cool greenhouse during winter, the root and crown appear sound, but it does not push shoots; how am I to proceed in order to succeed? A SUBSCRIBER.

[Shake off a portion of the old compost, repot (keeping the crown above the soil) in a soil consisting of one part a rich turfy maiden loam, one part turfy sandy peat, and the other equal portion of old rotted hot-bed dung. Chopping them up well together, and then sprinkle amongst it a handful of charcoal dust, and another of bits of charcoal. Place the plant in a hot-house, or similar situation as to heat, and unless some casualty has destroyed the eyes at the crown it will soon push. Where several shoots arise, thin away in an early stage the superfluous ones, so as to retain a few in order to have them vigorous. When the shoots have extended a foot in height the plant should be removed to a temperature of about sixty degrees. They require much light and a liberal portion of air to prevent them drawing up weakly. When the pot becomes filled with roots, repot, keeping the ball entire, and having a *liberal* drainage. In its growing condition it usually requires a free supply of *soft* water, and frequent syringing underside of the leaves, in order to preserve it from the red spider, without which precaution, daily, it will be almost certain to be attacked. When the plant has done blooming it should be allowed *gradually* to become dry at the roots, and be preserved in a greenhouse, free from frost, till February. The top should not be cut down lower than about six inches from the crown.—CONDUCTOR.]

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BRACHYCOMA IBERIDIFOLIA.—I want to have a bed in my flower-garden of this neat and pretty-flowering plant. With this intention I have sown seed in a pot, and am raising it in a hot-bed frame. I should be glad to know whether I may retain the plants in the seed-pot till the time of planting out in the open bed, with the prospect of fully succeeding, or whether the plants necessarily require to be potted singly as soon as fit, and then be put out with entire balls?

[The latter treatment is necessary, and to forward the plants as much as possible by keeping them, after potting, in the frame for a week or two, and then place them in a warm greenhouse or gentle hot-bed frame, where air must be admitted freely, so as to have the plants robust by the middle of May, to turn out of the pots. A rich loam and sandy-peat, not sifted, suits well to grow them in, and in which they bloom profusely.—CONDUCTOR.]

## REMARKS.

## LONDON HORTICULTURAL SOCIETY.

May 6.—This being the season of Azaleas and Rhododendrons, several fine varieties of these showy plants were produced. Among the latter, perhaps, the most remarkable were cut blooms of R. formosum, miscalled Gibsoni, from the Duke of Devonshire's gardens at Chiswick. This pretty East Indian species has been described for many years, but it is rarely to be met in gardens; on account of the plant having been grown in a stove the flowers were of a pure white, having much the appearance of large blooms of the white Indian Azalea: but when the plants are grown in a cooler house, and exposed to bright light, the flowers are beautifully streaked with pink, giving the plant a handsome appearance. Along with this was Dendrobium densiflorum, producing three handsome spikes of bright yellow blossoms. A certificate was awarded for the Rhododendron.—From Mr. J. Wells, gardener to W. Wells, Esq., were beautifully cut blooms of Rhododendrons, including R. caucasicum, a hardy rather dwarf-spreading species, and R. campanulatum, a perfectly hardy Indian species, of considerable beauty, which will suffer any amount of cold without the least injury. The latter is easily distinguished by its somewhat large and flat foliage, the underside of which is covered with a soft ferruginous down, and by its large white flowers which are tinged with pink. The principal part of these Rhododendrons had been kept during winter under the canvass of a Tulip shade, assisted by mats at the sides in very severe weather, but exposed to the weather at all favourable times. A Banksian medal was awarded for the latter. —Messrs. Cunningham and Orr, Manchester, sent a hardy hybrid Rhododendron, with light-coloured blossoms, apparently a cross between R. caucasicum and some of the common hardy kinds.—From Mr. Jackson, of Kingston, was a pale-coloured seedling Rhododendron, very distinctly marked with dark brown spots.—Finally, the Dean of Winchester sent a collection of blooms of hybrid Rhododendrons in excellent condition, including one named R. campanulatum, which appeared, however, to be a spurious variety of that species. These were mentioned to have stood the whole of this untoward winter unprotected in the open gardens, at Bishopstoke, where the plants are now in full beauty. They were mostly red kinds, having in them much of the crimson arboreum. Along with these were cut blooms of Magnolia Soulangeana, a cross between conspicua and purpurea; M. purpurea and gracilis; the latter like purpurea, but smaller. A Banksian Medal was awarded for these.—Mr. Errington, gardener to Sir P. G. Egerton, Bart., again sent a collection of seedling Cacti, among which, one named regalis is a fine showy scarlet flower, measuring fully six inches across. Several others also possessed considerable beauty.—From Messrs. Veitch and Son, of Exeter, was Bletia catenulata, which was found by their collector, Mr. Lobb, growing on dry sandy hills, near Muna, in Peru. It is the original species named by the Spanish botanists after Don Louis Blet, whose name the genus bears, and is not known to have been before introduced into this country.—Mr. Ayres, gardener to J. Cook, Esq., sent Begonias coccinea and suaveolens, the latter remarkable for its fragrance; a Cactus called Conway's Giant, a large, noble-looking flower; Leschenaultia Baxterii; and Chorozema angustifolium, a New Holland species of considerable beauty. A Banksian Medal was awarded for this and the Begonias.—From Mr. Cole, gardener to C. Lewis, Esq., was the larger variety of Corræa speciosa, and a seedling Cineraria.—R. Golledge, Esq., sent a collection of Calceolarias.—From Mr. Robertson, gardener to Mrs. Lawrence, was a perfectly hardy scarlet Rhododendron, and an exceedingly handsome Erica propendens, which was covered from the soil in which it grew to the top with multitudes of pretty little pink bells; a Banksian Medal was awarded for it.—Messrs. Loddiges sent Epacris miniata; a species of recent introduction, having much of the aspect of E. grandiflora, but possessing peculiarities which readily distinguish it from that species. The flowers are long, of a rosy-pink colour, passing into pure white at the end of the tubes; indeed, we can scarcely imagine anything more beautiful than this plant when in full bloom; it was awarded a Banksian Medal.—Mr. Lawrence, of Parliament-street, sent a small watering-pot, for plants in sitting-rooms, which was worked on the same principle as the one exhibited at a former meeting.—From the garden of the Society were plants of the white and purple Indian Azaleas; Chorozema varium, a handsome Swan River shrub; Gesnera Douglasii; Æschynanthus maculatus, an Indian species, with bright scarlet blossoms; Cyrtochilum hastatum; Eriostemon buxifolium, a pretty New Holland shrub, bearing multitudes of showy flowers, and deserving a place in every greenhouse; varieties of Epidendrum macrochilum and Oncidium ampliatum; Spiræa Reevesiana, a hardy species, but whose pretty heads of white flowers and fine green foliage render it well worthy of a place in the greenhouse, where it is very ornamental at this season; Clematis Sieboldii, and two Cinerarias. Seeds of Buddlea Lindleyana were distributed to such Fellows as wished to receive them. This is a native of Chusan, where it was found by Mr. Fortune, growing in ravines and on banks, in company with Glycine sinensis; it is said to form a fine shrub five or six feet in height, with clusters of deep violet flowers, probably as large as those of the Persian Lilac. It is supposed that it will turn out to be hardy.

## ROYAL BOTANIC SOCIETY, LONDON.

The first exhibition for the season was held on May 6, in the Gardens, inner circle, Regent's Park. The morning was gloomy, yet no rain fell until after the gates were opened, at two o'clock. Those patrons of gardening, whom no weather heretofore ever daunted, had apparently on the present occasion lost all their enthusiasm, for when the gates were thrown open, scarcely a dozen persons had assembled for admission, and not a single carriage, with the exception of two cabs, had made its appearance. The garden itself, which was in good order, looked cheerless, with its numerous empty benches. When the rain began to fall the military bands took shelter under the canvass, which afforded during the afternoon ample space for the company to patrole up and down, listening to the music. The exhibition itself, although inferior to former seasons, was creditable to the growers, evincing improvement in plant culture. The Azaleas which were expected to have been in great perfection, were inferior to many former exhibitions, and the collections of Orchidaceous plants were much below the average. Of new plants there were scarcely any worth recording, unless it was the new Gompholobium from Messrs. Lucombe, Pince, and Co. In the general collections there were some striking specimens. Eriostemon buxifolium, from Messrs. Veitch, of Exeter, was an extraordinary plant, in the highest possible perfection; so also was an Erica aristata, from Mr. May, as regarded health, but not in good bloom. There were some noble specimens of Erica Cavendishii; that in Mr. Pawley's collection was in robust health, although scarcely in flower. In the same group was also a gorgeous specimen of the double red Azalea, just in its prime, and literally loaded with blooms. In the collections of Messrs. Hunt and Barnes were some wonderful specimens of cultivation, and Mr. Green had some fine plants; Azalea variegata stood out in bold relief, a perfect mass of bloom; in his collection, also, were two new kinds of which much was expected, viz. exquisita and prælautissima. They, however, were inferior to many of the older varieties. The Roses of Messrs. Lane and Son were done superbly, so also were the Pelargoniums of Mr. Gaines, of Battersea. We cannot omit mentioning that the spelling of the names in many of the collections was extremely inaccurate, a circumstance whith has a tendency to mislead the visitors, and betrays great carelessness on the part of the exhibitor.

Large collections of 30 Stove and Greenhouse Plants were contributed by Mr. Hunt, gardener to Miss Traill; Mr. Barnes, gardener to G. W. Norman, Esq.; and Mr. Green, gardener to Sir E. Antrobus, Bart.

Beautiful specimens of Cape Heaths were exhibited in great variety, and excited considerable interest. The best collection was from the garden of E. Goodheart, Esq.; it contained noble bushes of mundula, perspicua nana, and propendens, the latter literally covered with blossoms; a well-grown aristata major; a large specimen of grandinosa; and several others, exhibiting equally good management.

The display of Roses in pots, considering the season, was excellent; the plants were exceedingly well grown, and reflected the highest credit on the cultivators. Collections were produced by Mr. Lane, Mr. Slowe, and Mr. Beck.

In Azalias, a first prize was awarded to Mr. Green, for a collection containing variegata in fine condition; speciosissima, producing large bright rose-coloured blossoms; and a good plant of Indica alba.—In the Nurserymen's class a first prize was awarded to Mr. Smith, of Norbiton, for a collection containing good plants of formosa, bicolor nova, the old Indica alba, and splendens.—Mr. Gaines obtained a second prize for a group, in which were pulchella, Queen Victoria, Florida, and floribunda; the latter covered with blossoms of a most intense scarlet colour. Some good specimens were also exhibited by Mr. Clarke, who sent a splendid plant of the double-red, and an excellent double-flowered purpurea.—Mr. Slowe likewise furnished very fine plants of Indica alba and plumosa; and in Mr. Hunt's collection was a most beautiful lateritia, and a magnificent plant of splendens, 5 feet in height and 3 feet through.

The display of Pelargoniums exceeded our expectations. The collections which contained the new and distinct varieties were not only the most interesting, but they were produced in finer condition, than the older sorts. Mr. J. Dobson, gardener to Mr. E. Beck, had no competitor in this class.

Calceolarias.—First prize, Mr. Gaines, for six distinct and well-grown varieties, named Sylph, Eclipse, Candidate, Vivid, Venosa, and Crimson Superb.

Cinerarias were shown in collections of four distinct varieties, in 11-inch pots.

Seedlings were not numerous in any class. Two Seedling Pelargoniums of the present year from Mr. Beck, of Isleworth, Named Hebe's Lip and Patrician, received Certificates of Merit; both flowers are large, of good substance, and form, and should they retain their present good qualities will find their way into every good collection. Resplendent, a seedling of 1844, from the same grower, is a high-coloured variety, with a white centre, and remarkably clear and striking in appearance.

Among Miscellaneous Objects were six handsome plants of Schizanthus, from M[illegible] Stockwell.—A collection of British Ferns from Mr. Taylor, a[illegible]cuted with cut flowers, illustrating the principles of [illegible] colours of plants in beds, in a flower-garden, [illegible]

## [illegible]S AND COLLECTIONS OF [illegible], NEAR LONDON.

[illegible] every one interested in horticultural [illegible] associated with the great Exhibitions of [illegible] known and appreciated, that every lover of gardens will be [illegible] hearing of the actual state of the collection at Ealing Park on the eve of those occasions when the choicest are again to be produced for public competition.

Ealing Park, then, has been singularly favoured this winter, compared with other suburban residences; so fresh and luxuriant are all the evergreens, that one might be led into the belief that a great glass-house had sheltered the whole. The Laurustinus are blossoming freely, so also are the crimson Rhododendrons; Garrya elliptica; and Euonymus variegatus are quite unscathed; Aralia japonica and Paulownia imperialis are bursting out with their wonted vigour; a fine plant of Arbutus procera is just coming into flower; Photinia serrulata and Maclura aurantiaca are both unhurt, and so is Berberis trifoliata, a rare shrub of great beauty and interest. Ceanothus thyrsiflorus has been killed almost everywhere near London; but at Ealing Park, against a wall, it appears as green as if we had had no winter at all.

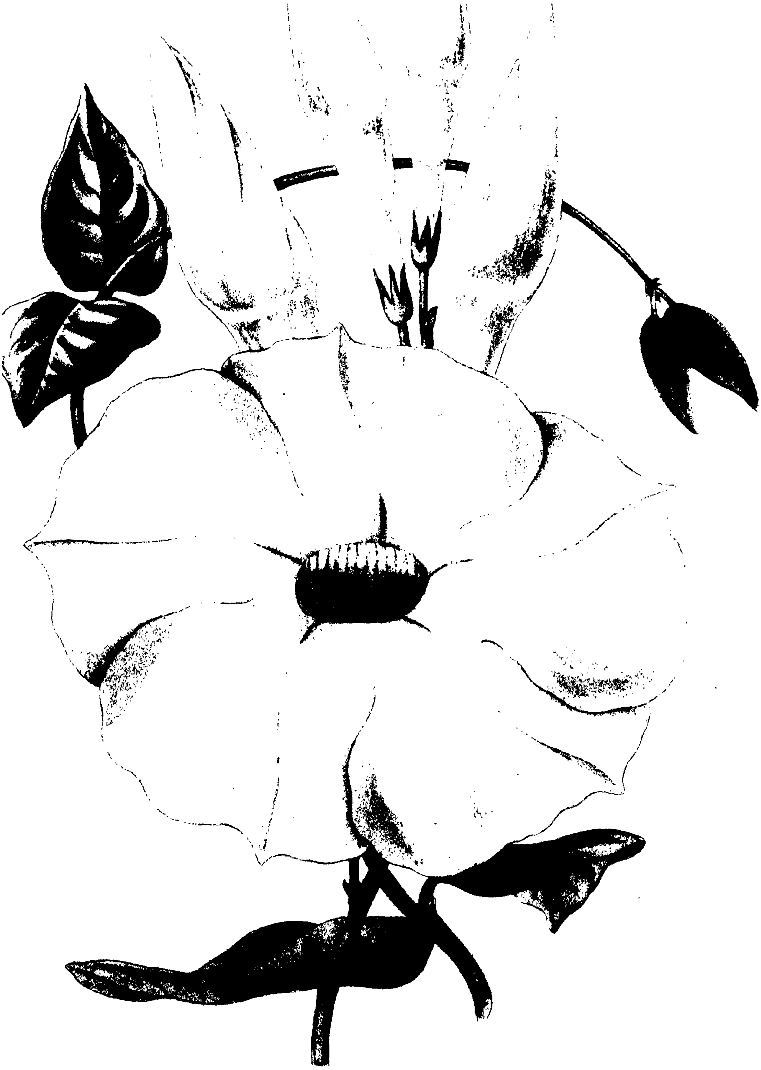
The lawn, connected with the house, occupies a surface of several acres, studded all over with valuable objects of great interest; amongst them we observed the following:—Fine plants of Picea Webbiana, P. nobilis, P. amabilis, Pinus Montezumæ, P. monticola; indeed all the scarce and valuable sorts procurable in the vicinity of London. A great number of Deodars, Araucarias, &c., are occasionally grouped over this lawn, which, with great propriety, may be termed a Pine-grove; one remarkable feature is an avenue of Cedrus deodara, which, in the course of a few years, will be a grand object, especially when looking from the lower part of the grounds towards an appropriate building, called Pope's Temple. In passing through the grounds the visitor is occasionally and imperceptibly brought into the view of some charming little scene, suddenly bursting upon him; so skilfully have the sentiments of the poet been carried into effect:—

> "More cautiously will taste its stores reveal;
> Its greatest art is, aptly to conceal;
> To lead, with secret guile, the prying sight
> To where component parts may best unite."

In going from the house, in one direction, you pass through an arch, forming a part of an architectural screen projecting from the principal building, and approach a piece of ornamental water; the walk on both sides is flanked with a row of Irish Yews, the effect of which is excellent. The Belvidere rises in the centre of the water, immediately before the spectator. The taste, however, which dictated such an arrangement, we are quite certain could never subscribe to the beds of herbaceous plants surrounding the water, and we were glad to find that their days were numbered. There is a piece of rock-work recently executed at considerable cost, representing some remnant of antiquity near Jerusalem; doubtless, this is accomplished with great truth, and much faithfulness in all its details. A noble Cedar of some two hundred years' growth sheds a sacred halo over these representations of antiquity; contiguous to this also is a lovely dell with fountains, and other appropriate objects of a similar kind, overshadowed with Willows from the tomb of Napoleon, at St. Helena. Close by are some fine specimens of Cercis siliquastrum, a princely Cherry-tree of great size, and an extraordinary Juglans nigra of immense growth.

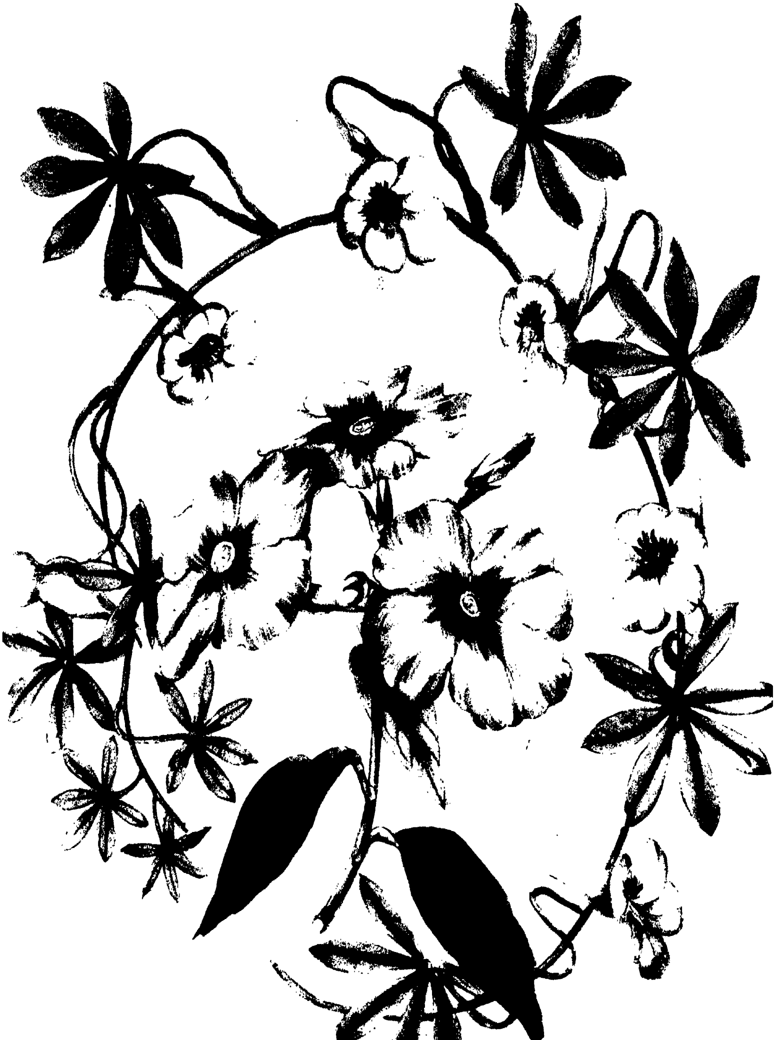
On this lawn we also noticed Ilex latifolia, and a singular Juniper, introduced by Lord Auckland, and presented to Mrs. Lawrence; it is of compact growth, and of a singular purplish glaucous hue; various architectural objects are judiciously placed about the grounds, and not the least of them is an ornamental dairy, beautifully, yet chastely fitted up with numerous specimens of natural history, as well as objects of art, decorative in character, yet appropriately applied. Close to the mansion is a conservatory, or rather greenhouse, chiefly filled with splendid Camellias in capital health, just gone out of bloom; on the outside are placed two superb plants of Araucaria excelsa, giving quite a character to that side of the building; leaving this conservatory, and proceeding through the shrubbery on the right from the house, the visitor is brought at once in front of the principal hothouses; in approaching them you pass through a flower-garden, chiefly appropriated to summer ornamental flowering plants, with various accompaniments of vases, statues, rock-work, &c., and in the centre a basin of water with a Triton fountain. Those hothouses are filled with plants of no ordinary kind, not only as regards their intrinsic value, but particularly with reference to the care and skill bestowed in their cultivation. Taking these two circumstances together few private establishments in this, or as far as we know, any other country, can approach the collection at Ealing Park; such an assemblage of the most valuable objects in this branch of natural history could only have been brought together at great cost, aided by an enthusiasm that knows no limit; these botanical riches are open to public inspection by application at Ealing Park on certain days. There are four houses filled chiefly with New Holland plants, two of them measure 65 feet by 17 each, all of them with span roofs.

A new forcing pit, 38 feet long, is heated with water underneath the bed of earth, in which are growing Cucumbers and Melons, and a few rare plants. We remarked two new species of Gesnera, Pleroma Benthamianum, Luculia Pinceana, Luxemburgia ciliosa, the beautiful Cyrtoceras reflexum, Rondeletia sulphurea, Allamanda grandiflora, Echites melaleuca; Portlandia grandiflora, an old, but first-rate, plant; Hindsia violacea, Pavetta borbonica, Erythrochiton Braziliensis, and the extraordinary new Pitcher Plant called Nepenthes Rafflesii; there were also several large plants of Clerodendron fallax, C. Kæmpferi, C. squamatum, and C. macrophyllum, and a fine plant of the splendid Gardenia Sherbourniæ.



*Dipladenia crassinoda*

*Floricultural Cabinet July, 1845.*



*1. FRANCISCEA POHLIANA.* *2. TROPÆOLUM BRICKWOODII.*

THE

# FLORICULTURAL CABINET,

JULY 1st, 1845.

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## PART I.

## EMBELLISHMENTS.

## ARTICLE I.

### DIPLADENIA CRASSINODA. (Thick-jointed.)

This very beautiful flowering plant was originally discovered by Mr. Gardner, on the Corcovada Mountains, in the neighbourhood of Rio Janeiro. It requires a stove temperature and moist atmosphere in order to grow it in full vigour, but it will bloom well in a warm conservatory; and, being an evergreen climbing shrubby plant, when in bloom forms a most splendid object.

It was assigned to the Echites, but has now been separated, along with E. atropurpurea and E. splendens, and named Dipladenia.

It bears somewhat of the appearance of E. splendens, but is much richer in colour, and has the addition of a fine orange-coloured throat, which gives such a beautiful contrast.

The plant grows rapidly, blooms freely, and is easy to cultivate: it well deserves to be in every collection. A handsome specimen was exhibited at the Royal Botanic Gardens Show, held June 10th, 1845.

### 1. FRANCISCEA POHLIANA. (Pohl's Franciscea.)

Our drawing of this species was made at the nursery of Messrs. Loddiges', Hackney, who, we understand, received it from Brazil.

It is a pleasing kind, and of very free growth. The specific name was given in compliment to M. Pohl, the celebrated German botanist.

### 2. TROPÆOLUM BRICKWOODII. (Brickwood's Indian-cress.)

Seeds of this plant were brought from Chili by Mr. Brickwood, and presented by him to H. Berens, Esq., Sidcup, Kent, in whose garden it has bloomed this spring.

It is a pretty and delicately coloured species, bearing a slight resemblance to T. brachyceras: unlike that variety, however, it is quite a free bloomer, and therefore a very desirable improvement.

The same treatment as applied to T. tricolor will succeed in its cultivation.

### 1. SIPHOCAMPYLUS COCCINEA. (Scarlet-flowered.)

The brilliant colour of the flowers, their large size, and distinct bushy growth of this new species of Siphocampylus, is remarkable. It was received from South America by Messrs. James Veitch and Son, of the Killerton Nursery, Exeter,—gentlemen who have recently become famous for the many beautiful productions they have introduced, and which we have from time to time had occasion to notice in our remarks upon new or rare plants.

A specimen of our present subject was shown in May and June last at the Chiswick and Regent's Park exhibitions.

### 2. VASALIA FLORIBUNDA. (Abundant-flowering.)

This beautiful plant has bloomed in the nurseries of Messrs. Lucombe, Pince, and Co., and Messrs. Veitch and Son, at Exeter; and a plant from each of these gentlemen was exhibited last month at the Royal Botanic Society's Show, that from the former being awarded a prize.

It is a charming greenhouse shrub, being graceful in habit, and freely producing its lovely-coloured pendant blossoms.

In a soil of turfy sandy peat, having a small portion of leaf mould mixed, and a free drainage, the plant appears to luxuriate. As soon as plants are ready for sale, we have no doubt it will be noticed in our advertising sheet.

## ARTICLE II.

### OBSERVATIONS UPON PREPARING PELARGONIUMS, &c., FOR PLANTING OUT TO BLOOM IN THE OPEN FLOWER-BED DURING SUMMER.

BY C. C., OF SOMERSET.

HAVING observed in the June CABINET an Article on growing various plants in beds, and considering it not to go far enough in detail, and as the season for the final arrangement of the flower-beds is arrived, I am desirous to offer a few hints thereon for insertion in your valuable journal.

It may be proper in the first place to state the best way to prepare the various plants for the beds. At the beginning of March, when the plants begin to grow, my practice is to shorten the various plants I intend planting out in the beds down to three or four joints, which will induce the production of many shoots; which, by the later part of the month, will form strong bushy plants, fit to be placed under some temporary shelter till the proper season for planting them out in the beds.

Cuttings struck in the spring, as soon as they begin to grow, have their shoots shortened in the same way, being very careful to remove any flower-buds that appear till after the plants are planted in the beds, which will strengthen them a great deal. Scarlet Pelargoniums treated in this manner will require no pegging, as they are very liable to split at the joints; but Salvias, Verbenas, Anagallises, Heliatropes, Petunias, &c., I should recommend to be pegged down, not by wooden pegs, but strings of matting six inches long put over the shoot, and fastened in the ground by a small setting stick. One person can do more this way than two with wooden pegs, and the matting will not injure the most delicate shoots. Persons who grow Annuals in beds, I should recommend to gather the seed-pods as soon as the flowers are decayed, which will greatly prolong their bloom; but if the seed-pods are left to perfect their seed, the plants will soon decay. Take, for example, that beautiful annual, the Nemophila insignis; if the flowers are removed as soon as they begin to flag, it will prolong its duration a full month. If any person wishes to save seed, I should advise them to sow a patch in the kitchen-garden.

P.S. It has been hinted by a friend of mine that it would not be amiss to suggest to the Conductor whether it would not be most acceptable to the numerous readers of the CABINET to insert occasionally some of the communications discussed at the Gardeners' Mutual Instruction Societies, some of which are no doubt valuable.

[Any forwarded to us of the character named, we will insert with pleasure.—CONDUCTOR.]

## ARTICLE III.

### OBSERVATIONS UPON DOUBLE SWEET WILLIAMS.

BY CLERICUS.

FOR the last four years, I have been collecting and growing all the varieties of double-flowered Sweet Williams I could obtain. I have eighteen very dissimilar and beautiful varieties, varying in gradation from a white ground spotted with red, crimson, and purple, through the various shades of pink, rose, lilac, purple, scarlet, and crimson. I need not attempt to eulogize the flowers of this beautiful and ovely tribe; all admire Sweet Williams, and especially the double kinds. By proper attention in culture, I have my flowers not only very double, but three-quarters of an inch across; and these produced in fine corymbous heads, give a fine effect, especially so when the fine colours are so distinctively arranged as to have the best contrast. They are beautiful, whether grown in masses or singly, and well merit a situation in every flower-garden.

I grow mine in a good, moderately rich, loamy soil, upon a dry subsoil. I increase them by taking off slips in July: these soon strike root in pots placed under a hand-glass, or in a frame, inserting them in a moist, yellow sand: they would most likely root as well in sandy loam or sandy peat. I pot them singly towards the end of September, and keep them in a dry cool frame during winter turning them out entire at the end of March.

I can strongly recommend these lovely flowers to the notice of all persons who desire to have beautiful dwarf flowers for ornamenting the flower-garden. Some of my varieties I procured at nursery gardens, and others I met with in the gardens of various friends, to which I have added eight splendid seedlings of my own raising.

# ARTICLE IV.

## REMARKS ON THE GARDENS, &c., OF MEXICO, EXTRACTED FROM PRESCOTT'S HISTORY OF THE CONQUEST OF MEXICO.

BY AN AMATEUR FLORIST.

In the above-named work I have been much pleased to find numerous particulars relative to the gardens of Mexico, and of some of the finest plants of that country; and as we are indebted to that fine part of the world for many of our most beautiful flower-garden plants, I am persuaded it will be interesting to the readers of the Cabinet to peruse anything of a floral character connected with Mexico, I therefore send the following for insertion.

"*The Garden of an Aztec Monarch*—1400 to 1500 (A.D.)—Nezahualcoyotl's fondness for magnificence was shown in his numerous villas, which were embellished with all that could make a rural retreat delightful. His favourite residence was at Tezcotzinco, a conical hill about two leagues from the capital. It was laid out in terraces, or hanging gardens, having a flight of steps, 520 in number, many of them hewn in the natural porphyry. In the garden, on the summit, was a reservoir of water, fed by an aqueduct, that was carried over hill and valley for several miles, on huge buttresses of masonry. A large rock stood in the midst of this basin, sculptured with hieroglyphics representing the years of Nezahualcoyotl's reign, and his principal achievements in each. On a lower level were three other conservatories, in each of which stood a marble statue of a woman, emblematic of the three states of the empire. Another tank contained a winged lion, cut out of the solid rock, bearing in its mouth the portrait of the emperor. His likeness had been executed in gold, wood, feather-work, and stone, but this was the only one that pleased him. From these copious basins the water was distributed in numerous channels through the gardens, or was made to tumble over the rocks in cascades, shedding refreshing dews on the flowers and odoriferous shrubs below. In the depths of this fragrant wilderness marble porticoes and pavilions were erected, and baths excavated in the solid porphyry, which are still shown by the ignorant natives as the "Baths of Montezume!" The visitor descended by steps cut in the living stone, and polished so bright as to reflect like mirrors. Towards the base of the hill, in the midst of cedar groves, whose gigantic branches threw a refreshing coolness over the verdure in the sultriest seasons of the year, rose the royal villa, with its light arcades and airy halls, drinking in the sweet perfumes of the gardens. Here the monarch often retired to throw off the burden of state, and refresh his wearied spirits in the society of his favourite wives; reposing, during the noontide heats, in the embowering shades of his paradise, or mingling in the cool of the evening in their festive sports and dances. Here he entertained his imperial brothers of Mexico and Ilacopans, and followed the hardier pleasures of the chase in the noble woods that stretched for miles around his villa, flourishing in all their primeval majesty. Here, too, he often repaired in the latter days of his life, when age had tempered ambition, and cooled the ardour of his blood, to pursue in solitude the studies of philosophy, and gather wisdom from meditation. The extraordinary accounts of the Tescucan architecture are confirmed, in the main, by the relics which still cover the hill of Tezcotzinco, or are half buried beneath its surface. They attract little attention indeed in the country, where their true history has long since passed into oblivion; while the traveller, whose curiosity leads him to the spot, speculates on their probable origin; and as he stumbles over the huge fragments of sculptured porphyry and granite, refers them to the primitive races who spread their colossal architecture over the country long before the coming of the Acolhuans and the Aztecs.

"And here, also, they beheld those fairy islands of flowers, overshadowed occasionally by trees of considerable size, rising and falling with the gentle undulations of the billows. Here, again, they found fresh cause for admiration in the grandeur of the city, and the superior style of its architecture. The dwellings of the poorer classes were, indeed, chiefly of reeds and mud. But the great avenue through which they were now marching was lined with the houses of the nobles, who were encouraged by the emperor to make the capital their residence. They were built of a red porous stone, drawn from quarries in the neighbourhood, and, though they rarely rose to a second story, often covered a large space of ground. The flat roofs, *azoteas*, were protected by stone parapets, so that every house was a fortress. Sometimes these roofs resembled parterres of flowers, so thickly were they covered with them; but more frequently these were cultivated in broad terraced gardens, laid out between the edifices. Occasionally a great square or market-place intervened, surrounded its porticoes of stone and stucco; or a pyramidal temple reared its colossal bulk, crowned with its tapering sanctuaries, and altars blazing with inextinguishable fires. The great street facing the southern causeway, unlike most others in the place, was wide, and extended some miles in nearly a straight line, as before noticed, through the centre of the city. A spectator standing at one end of it, as his eye ranged along the deep vista of temples, terraces, and gardens, might clearly discern the other, with the blue mountains in the distance, which, in the transparent atmosphere of the table-land, seemed almost in contact with the buildings. As they (the Spaniards) passed down the spacious street, the troops repeatedly traversed bridges suspended above canals, along which they saw the Indian barks gliding swiftly with their little cargoes of fruits and vegetables for the markets, &c.

"The *Chinampas*, that archipelago of wandering islands, have, also, nearly disappeared. These had their origin in the detached masses of earth, which, loosening from the shores, were still held together by fibrous roots, with which they were penetrated. The primitive Aztecs, in their poverty of land, availed themselves of the hint thus afforded by nature. They constructed rafts of reeds, rushes, and other fibrous materials, which, tightly knit together, formed a sufficient basis for the sediment that they drew up from the bottom of the lake. Gradually islands were formed, two or three hundred feet in length, and three or four feet in depth, with a rich stimulated soil, on which the economical Indian raised his vegetables and flowers for the markets of Tenochtitlan. Some of these *Chinampas* were even firm enough to allow the growth of small trees, and to sustain a hut for the residence of the person who had the charge of it, who with a long pole, resting on the sides or bottom of the shallow basin, could change the position of his little territory at pleasure, which, with its rich freight of vegetable stores, was seen moving like some enchanted island over the water. How gay and picturesque must have been the aspect in those days with its shining cities, and flowering islets, rocking, as it were, at anchor on the fair bosom of its waters.

The gardens of Huaxtepec are thus described:—"The Spanish general Sandoval took up his quarters in the dwelling of the lord of the place, surrounded by gardens which rivalled those of Iztapalapan in magnificence, and surpassed them in extent. They are said to have been two leagues in circumference, having pleasure houses, and numerous tanks stocked with various kinds of fish, and they were embellished with trees, shrubs, and plants, native and exotic; some selected for their beauty and fragrance, others for their medicinal properties. They were scientifically arranged; and the whole of the establishment displayed a horticultural taste and knowledge, of which it would not have been easy to find a counterpart at that day in the more civilized communities of Europe. Such is the testimony not only of the rude conquerers, but of men of science, who visited these beautiful repositories in the day of their glory.

"But the best wealth of the first settlers was in the vegetable productions of the soil, whether indigenous or introduced from abroad by the wise economy of Cortés. He had earnestly recommended the Crown to require all vessels coming to the country to bring over a certain quantity of seeds and plants. He made it a condition of the grants of land on the plateau, that the proprietor of every estate should plant a specified number of vines in it. He further stipulated, that no one should get a clear title to his estate until he had occupied it eight years. He knew that permanent residence could alone create that interest in the soil which would lead to its efficient culture; and that the opposite system had caused the impoverishment of the best plantations in the islands. His various regulations, some of them not a little distasteful to the colonists, augmented the agricultural resources of the country by the addition of the most important European grains, and other vegetables, for which the diversified climate of New Spain was admirably adapted. The sugar-cane was transplanted from the neighbouring islands to the lower level of the country, and, together with indigo, cotton, and cochineal, formed a more desirable staple for the colony than its precious metals. Under the sun of the tropics, the peach, the almond, the orange, the vine, and the olive, before unknown there, flourished in the gardens of the table-land, at an elevation twice as great as that at which the clouds are suspended in summer above our heads. The importation of a European fruit or vegetable was hailed by the simple colonists with delight. The first produce of the exotic was celebrated by a festival, and the guests greeted each other as on the appearance of an old familiar friend who called up the remembrance of the past, and the tender associations of their native land.

"The Banana, so generally heard of, is a celebrated plant in Mexico. Another is the Cacao, the fruit of which furnished the chocolate,—from the Mexican *chocolate*—now so common a beverage throughout Europe. The Vanilla, confined to a small district of the sea-coast, was used for the same purposes, of flavouring food and drink, as with us. The great staple of the country, as, indeed, of the American continent, was Maize, or Indian corn, which grew freely along the valleys, and up the steep sides of the Cordilleras, to the high level of the table-land. The Aztecs were as curious in their preparation, and as well instructed in its manifold uses, as the most expert New-England housewife. Its gigantic stalks in these equinoxial regions afford a saccharine matter not found to the same extent in northern latitudes, and supplied the natives with sugar little inferior to that of the cane itself, which was not introduced among them till after the conquest. Hernandez, who celebrates the manifold ways in which the Maize was prepared, derives the name from the Haytian word *Mahiz*. But the miracle of nature was the great Mexican Aloe, or *Magney*, whose clustering pyramids of flowers, towering above their dark coronals of leaves, were sprinkled over many a broad acre of the table-land. Its bruised leaves afford a paste, from which paper was manufactured; its juice was fermented into an intoxicating beverage, *pulque*, of which the natives to this day are excessively fond; its leaves further supply an impenetrable thatch for the more humbler dwellings; thread, of which coarse stuffs were made, and strong cords, were drawn from its tough and twisted fibres; pins and needles were made of the thorns at the extremity of its leaves; and the root, when properly cooked, was converted into a palatable and nutritious food. The *Agave*, in short, was meat, drink, clothing, and writing materials, for the Aztec! Surely never did nature enclose in so compact a form many of the elements of human comfort and civilization. It would be obviously out of place to enumerate in these pages all the varieties of plants, many of them of medicinal virtue, which have been brought from Mexico into Europe. Still less can I attempt a catalogue of its flowers, which, with their variegated and gaudy colours, form the greatest attraction of our greenhouse. The opposite climates embraced within the narrow latitude of New Spain have given to it, probably, the richest and most diversified flowers to be found in any country on the globe. The different products were systematically arranged by the Aztecs, who understood their properties, and collected them into nurseries more extensive than any then existing in the Old World. It is not improbable that they suggested the idea of those 'gardens of plants,' which were introduced into Europe not many years after the conquest. The first regular establishment of this kind, according to Carli, was at Padua in 1545."

## ARTICLE V.

### THE GRAND FLORAL EXHIBITIONS OF THE METROPOLIS.

An opportunity of great utility is afforded the cultivator of flowers by floral exhibitions: by the assemblage of numerous choice and new kinds of plants, he can early become acquainted with such as are good; he may besides learn a great deal in successful cultivation by noting much of the manner adopted in growing the finest specimens he sees; and thus is rendered more general that kind of superior skill which, without these exhibitions, would continue confined to a few, just as it was previous to the system of annual exhibitions being adopted. Public competition creates animation, and tends to rouse into exertion all the cultivator's capabilities with a determination of equalling his compeers. Under the influence of causes like these, improvement spreads; like as the circles formed in water, when disturbed by a blow,—at first there is a little agitation exclusively at the point of displacement, but the tranquil fluid once set in motion, the ripple spreads, and its circumference is quickly extended till it embraces the whole breadth of the stream.

The extensive patronage received by the principal floral societies of London enables them to give exhibitions upon an extensive and liberal scale; and the facility offered by the numerous railways now established, of a speedy, cheap, and easy conveyance for plants, will no doubt induce persons having new and good things to send them to some of these exhibitions. We have therefore determined, from time to time, to publish, for the benefit of our readers, and especially those residing at a great distance, a detailed account of each exhibition, commencing with that of the first show for this year of the

## HORTICULTURAL SOCIETY,

*Chiswick, May* 24.

This exhibition, regarded as a whole, was exceedingly fine, and indeed, we believe, the best the society ever had. Some idea of its extent may be formed from the fact that, in addition to the usual several commodious tents, a new one of 100 feet long, and containing about 300 feet of tables, was added, and yet it was found necessary to construct additional staging for a large number of plants. The general excellence of the specimens in all the collections was very remarkable; in Orchidaceæ especially, the display was magnificent, and the collections of stove and greenhouse plants were likewise very superior: the most prominent features in all these we shall particularize as we proceed. The new species of plants shown were but few, and in seedling florist-flowers the best was Mr. Beck's Pelargoniums, and the Calceolarias of Messrs. Kinghorn and Gaines; in the latter was two or three deserving of particular mention, although no prizes were awarded to them, viz., Rosina (Kinghorn), Hope (Kinghorn), and Gaines's Conspicua and Flora. In Mr. Hoyles's Pelargoniums the one we most fancied was called Chimborazo, a large good shaped flower, of some substance, and much smoother than his others.

The visitors to the meeting numbered 3622, all of whom appeared highly delighted with the splendid display they witnessed, and as the day was fine, would have returned home gratified with the agreeableness of the whole, were it not that by about half-past four o'clock some heavy clouds arose, and presently discharged torrents of rain upon the scene; consequently, all those unprovided with large umbrellas, amongst which unfortunate number we happened to be, had no chance of escaping from the tent they were under but with a complete soaking. We hope arrangements will be made to prevent such a disagreeable termination to future meetings, by constructing a covered passage from one of the garden entrances to the tents, as well as to connect them with each other.

The regulations of the society enable all persons, whether fellows of the society or not, to send subjects for exhibition; but the society request exhibitors will notify in writing, previous to the day of meeting, what plants they intend to supply, in order that due provision may be made for the proper distribution of the specimens on the tables. As it is necessary that the judges should proceed to consider the respective merits of the exhibitions by 10 AM., and as it is absolutely indispensable that the tables should be arranged by that time, it has been determined that no subject for exhibition shall be admitted into the garden after half-past 8 o'clock in the morning; and if the owners of any locked-up or other cases should not be in the exhibition tent at the said hour, such cases or boxes must be excluded from competition. All specimens will remain untouched until after 6 o'clock, when they will be delivered into the hands of the exhibitors. Exhibitors of cut flowers must supply their own boxes or stands. No box or stand should exceed 8 inches in height at the back, or 18 inches in depth from front to back: the lids of all boxes must either be loose, or made to unhinge. The society distributes the following rewards, namely:—

| | £. | *s.* | *d.* | |
|---|---|---|---|---|
| 1. | 20 | 0 | 0, | or the large gold medal. |
| 2. | 10 | 0 | 0, | or the gold Knightian medal. |
| 3. | 7 | 0 | 0, | or the gold Banksian medal. |
| 4. | 4 | 0 | 0, | or the large silver gilt medal. |
| 5. | 1 | 15 | 0, | or the large silver medal. |
| 6. | 1 | 5 | 0, | or the silver Knightian medal. |
| 7. | 1 | 0 | 0, | or the silver Banksian medal. |
| 8. | 0 | 10 | 0, | or the Certificate. |

Exhibitors to whom any of these shall be awarded may receive their value in money or in plate. If in case an exhibitor shall receive a first prize in any one class of plants, he shall not be entitled to receive any other in the same class.

Names fairly written are to be attached by exhibitors to all florist's flowers, and the judges are restrained from awarding any medal to such exhibitions, whatever their merit may be, if this regulation is not complied with. By florist's flowers are meant not only flowers usually so named, but also Fuchsias, Pelargoniums, Roses, and Calceolarias. It is also hoped that all other subjects of exhibition will be neatly and legibly labelled with their names. The judges have the power of increasing or diminishing the number and value of the awards offered by the society for particular objects, and also of conferring awards in cases not contemplated in these regulations, if they think necessary to do so. The society's prizes are offered less for new and curious objects than for fine specimens of horticultural skill, the design of the council in instituting these meetings being not so much to encourage the collector as to reward the skilful gardener; for in cases where the objects exhibited do not appear worthy of a prize, a bad single exhibition might obtain a prize merely because there is no better exhibition of the same class to oppose it.

## AWARDS.

### CLASS I.

In which Nurserymen and Private Growers exhibit independently of each other.

### PELARGONIUMS.

*In collections of* 12 *new and first-rate varieties, cultivated with superior skill, in pots of* 24 *to a cast.*

*Private Growers.*

1st Prize, 7*l*., J. Dobson, gardener to Mr. E. Beck, Isleworth.—These were grown in slate-pots, which Mr. Beck manufactures, and certainly presented a very superior appearance: the blooms were large in size, and of the best shape. The kinds were, Zanzummim (Beck), first-rate flower; Lurida (Beck), Leonora (Beck), Resplendant (Beck), Sir R. Peel (Foster), one of the best and most distinct in all collections; Pulchellum (Foster), Sultana (Foster), Favourite (Beck), very fine; Susanna (Beck), Bella (Beck), very fine; Hero (Beck), and Conflagration (Foster).

2nd Prize, 4*l*., Mr. Cock, Chiswick.—These were likewise all bloomed exceedingly well. The varieties were, Madeline, Angelica, Cyrus, Sir R. Peel, Mad. Taglioni, a mass of bloom; Rosetta, superb, Wizard, Queen Philippa, Unit, Eliza Sauvage, Erectum, and Pre-eminent.

No other competitors.

*Nurserymen.*

1st Prize, 7*l*., Mr. N. Gaines, Battersea.—For Cotherstone, fine; Ackbar, fine; Augusta, Saxon King, fine; Queen of Bourbons, Lady

Prudhoe, Excelsa, Druid, fine; Princess Alice, fine; Pirate, King of Beauties, fine; and Lady Mildmay.

No other competitor.

*In collections of* 12 *varieties in pots of* 24 *to a cast.*

*Private Growers.*

1st Prize, 7*l.*, Mr. R. Staines, Paddington.—For Duke of Cornwall, Lady Sale, Superbum, Sunrise, Roulette, Erectum, Madeline, Enchantress, Alice Gray, Symmetry, Hebe, and Duchess of Sutherland.

2nd Prize, 4*l.*, J. Dobson, gardener to Mr. Beck, Isleworth.—For Majestic (Beck), fine; Erectum (Beck), Serjeant (Beck), The Purple (Beck), Susanna (Beck), Flora (Beck), good; Sir R. Peel (Foster), Cleopatra (Beck), Luna (Foster), Matilda (Foster), Dido (Foster), and Lord Chancellor (Foster).

*Nurserymen.*

1st Prize, 7*l.*, Messrs. C. D. Smith and Co., Pimlico.—For Grand Duke, Coronation, Grand Monarch, Madeline, Arabella, Mrs. Stirling, Cyrus, Gipsey, Hebe, Fair Maid of Devon, Queen of the Fairies, and Lady Sale.

2nd Prize, 4*l.*, Mr. N. Gaines, Battersea.—For Cotherstone, Queen of Bourbons, Rising Sun, fine; Lady Prudhoe, Pilot, Coronation Superb, Douglas, Hermione, fine; Enchantress, Ackbar, Madeline, and Lady Sale.

*In collections of* 6 *varieties in pots of* 8 *to a cast.*

1st Prize, 1*l.* 15*s.*, Mr. N. Gaines, Nurseryman, Battersea.—For Nymph, fine; Madeline, Lady Isabella Douglas, Lady Sale, Julia and Albina. These were superior grown bushes, 3 feet across.

No competitors.

ROSES,

*In collections of* 12 *for Private Growers, and in collections of* 25 *distinct sorts for Nurserymen, in pots.*

*Private Growers.*

1st Prize, 7*l.*, J. Dobson, gardener to Mr. Beck, Isleworth.—This collection was in the very vigour of health, profusely in bloom, and most deservedly received the first prize; the varieties were, White

China, Hardy, Fabvier, Mrs. Bosanquet, Nemesis, fine; Hyclere seedling, Caroline, blush; Augustin Marget, clear salmon; Belle Allemande, large pale yellow of fine shape; Fenelon du Luxembourg, Pauline, Plautier, creamy white; and Beau Carmin, a beautiful rose.

2nd Prize, 4*l.*, Mr. J. Stowe, gardener to R. Baker, Esq.—The best amongst which were Romaine, shaded straw; Triumphant, bright rosy; Safrano, fine; and Antheros, cream colour.

3rd Prize, 1*l.* 15*s.*, Alex. Rowland, Esq., Rosenthal, in which we did not note any very remarkable.

4th Prize, 1*l.*, Mr. Milne, gardener to C. S. Chauncey, Esq., Little Munden.—These were cultivated very successfully; we observed, as most striking, Nephetas, fine light yellow; La Belle Allamande, Las Casas, very double and good shape; and Eugene Napoleon.

### *Nurserymen.*

1st Prize, 7*l.*, Messrs. Lane and Son, Berkhampstead.—Comprising only the very best show flowers, viz., William Jesse, large rosy-purple; Cramoise Supérieure, bright rich red; Aubernon, Argo, Belle Allamande, fine; Louis Buonaparte, good; Psyche, Tea Blush, Fulgorie, Aricie, La Pactole, Prince Charles, very fine; Abbe Mioland, blush, fine; Compte de Osmond, good; Acidale, Triomphe de Flore, fine; Marjolin, good shape; Caroline, good; Eugene Beauharnois, dark; Armosa, fine; Grand Captain, brilliant red; Bougere, good; Eliza Suavage, Fabvier, and Henry V.

No 2nd prize awarded.

3rd Prize, 1*l.* 15*s.*, Mr. Stedman, Isleworth.

### *Single specimens in pots displaying superior cultivation.*

1st Prize, 1*l.* 5*s.*, J. Dobson, gardener to Mr. Beck, Isleworth.—For Armosa, which was well cultivated in a slate-pot, but had a too artificial appearance, by being tied closely to a number of sticks.

No competitors.

Besides the above, Mr. A. Milne exhibited 25 varieties in cut blooms, some of which were well-shaped flowers; and Mr. W. P. Ayres had a specimen of the New Yellow Noisette, Cloth of Gold, which is large in size and very fragrant.

### CAPE HEATHS,

*In collections of 20 entirely distinct varieties.*

*Private Growers.*

1st Prize, 10*l.*, Mr. J. Robertson, gardener to Mrs. Lawrence, Ealing Park.—The whole of the collection was remarkably fine large bushy plants: we particularly noticed E. Cavendishii, loaded with its beautiful yellow flowers; Depressa, very fine; Persoluta alba, 3 feet in height and 2 feet in diameter; Linnæana nova and mirabilis; Humeana, very pretty; Ampullacea vittata, fine; Pinea; Thunbergia; Vestita alba; Westphalingia; Propendens, very good; Perspicua nana, a neat plant; and the following varieties of E. ventricosa, viz., v. coccinea; v. c. minor; v. carnea; and v. superba.

2nd Prize, 4*l.*, Mr. May, gardener to E. Goodheart, Esq., Langley Park.—These were likewise splendid specimens, and all profusely in bloom. Humeana was 3 feet in height and 4 feet in diameter; Propendens, very large; Aristata major, a wonderful plant, but thinly-bloomed; Hartnelli, a splendid bush; Fastigiata lutescens, in prime order; Mundula, covered with bloom; Grandinosa, and Ventricosa alba, fine; with Odora rosea, Perspicua nana and elegans, in admirable condition; Hybrida, not quite in bloom; Rubro-calyx; Willmoreana; Mirabilis; and a small, but pretty plant of Sprengelii.

*Nurserymen.*

1st Prize, 10*l.*, Messrs. Fairbairn, Clapham.—A fine collection of immense bushes. We observed Cavendishii in admirable health, 3 feet in height and as much in diameter; Intermedia, very fine; Metulæflora, splendid; with very remarkable plants of Ampullacea tricolor and suaveolens; also good plants of Ampullacea nana, Vestita coccinea, Humeana, Dilecta, Vestita alba, and Ventricosa carnea, v. alba, and v. coccinea minor.

2nd Prize, 4*l.*, Messrs. Rollison, Tooting.—Among them were Mundula, very pretty; Dilecta, good; Humeana; Nitida, with clear white bells; Fulgida superba, a fine kind; Vestita blanda; and Beaumontiana; with Propendens and Fragrans.

3rd Prize, 1*l.* 15*s.*, Mr. Pawley, Bromley.—Among them was a fine Cavendishii; Perspicua nana, very fine; Prægnans, Coccinea minor, pretty; Dilecta, neat; with Halicacaba; Nitida; Hybrida, very pretty; and Vestita coccinea minor.

*In collections of* 12 *entirely distinct varieties.*

*Private Growers.*

1st Prize, 7*l.*, Mr. Hunt, gardener to Miss Traill, Bromley.—These were magnificent bushes, averaging from about 3½ feet high, and as much in diameter; Sprengelli, suaveolens, vestita coccinea, ventricosa prægnans, Hartnelli, ampullacea rubra, were very superb.

2nd Prize, 4*l.*, Mr. G. Plumbley, gardener to C. J. Dimsdale, Esq., Essenden-place.—Containing excellent specimens of depressa, melastoma, and hybrida.

*Nurserymen.*

1st Prize, 7*l.*, Messrs. Frazer, Lea-bridge.—These were beautiful dwarf bushes, and profusely in bloom. Thunbergiana, Beaumontia, propendens, Bergiana, perspicua nana, and denticulata moschata, were especially striking.

*In collections of* 6 *entirely distinct varieties.*

*Private Growers.*

1st Prize, 4*l.*, Mr. Bruce, gardener to B. Miller, Esq.—Containing very good specimens of Cavendishii, fastigiata, and grandinosa.

2nd Prize, 1*l.* 15*s.*, Mr. Evan Jack, gardener to R. G. Lorraine, Esq., Wallington.—We observed good plants of sulphurea and suaveolens.

3rd Prize, 1*l.* 5*s.*, Mr. W. Taylor, gardener to J. Costar, Esq., Streatham.

*Nurserymen.*

1st Prize, 4*l.*, Mr. Dawson, Brixton.—There were good compact specimens of hybrida, mirabilis, and dilecta.

No competitors.

*Single specimens displaying very superior cultivation.*

*Private Growers.*

1st Prize, 1*l.* 15*s.*, Mr. Robertson, gardener to Mrs. Lawrence.—For propendens, a beautiful plant 3 feet high, and as much in diameter, loaded with its pretty little bell-shaped flowers.

2nd Prize, 1*l.* 5*s.*, Mr. G. Plumbley, gardener to C. J. Dimsdale, Esq., for suaveolens.

*Nurserymen.*

No 1st or 2nd prize awarded.

3rd Prize, 1*l.*, Mr. Dawson, Brixton, for a compact and pretty mundula.

CALCEOLARIAS,

*In collections of* 6, *in pots of* 29 *to a cast.*

*Private Growers.*

1st Prize, 1*l.* 15*s.*, Mr. Kinghorn, gardener to A. Murray, Esq., Twickenham.—Comprising Queen Victoria, fine; King of Saxony, primrose, full of small, round, crimson spots, very beautiful; Marquis of Bute, Grandis, Vesta, and Mary Queen of Scots.

2nd Prize, 1*l.* 5*s.*, Mr. G. Stanley, gardener to H. Berns, Esq., for Fairy Queen, very good; Lane's Monarch, Rival King, Magician, Duke of Wellington, and Henrietta, very bright red.

*Nurserymen.*

1st Prize, 1*l.* 15*s.*, Mr. N. Gaines, Battersea.—For Standishii, Desirable, Vivid, bright crimson red; Napoleon, Eclipse, and Conductor.

No other competitor.

## CLASS II.

In which all persons are admitted to equal competition.

STOVE OR GREENHOUSE PLANTS,

(from which Orchidaceæ, Pelargoniums, Fuchsias, and Calceolarias are excluded)

*In collections of* 40 *plants.*

1st Prize, 20*l.*, Mr. J. Robertson, gardener to Mrs. Lawrence.—Containing numerous extraordinary specimens, the most superior of which were, in Azaleas, lateritia, a mass of bloom; alba and Phœnicea, very large and fine; sinensis, a large plant, having a profusion of its bright orange-red blossoms. In Chorozemas was an immense bush of ovatum, and also varium, cordatum, and macrophyllum were 5 or 6 feet high and 4 or 5 feet in diameter, each adorned with multitudes of their bright and charming little flowers. Of the genus Eriostemon there were two species, viz., myophoroides and cuspidatum, of very large size, and remarkably showy. In Pimeleas was a fine plant of incana and spectabilis, 3 feet high and 4 feet in diameter. Of Cape Heaths we noted good specimens of propendens, depressa, and perspicua. There were five trained specimens of Manettia cordifolia and glabra. Leschenaultia formosa, a large bush, 2 feet high by 3 feet diameter, though not well in bloom. Tabernæmontana coronaria flore-pleno was shown in excellent bloom. Cytisus filipes afforded an agreeable relief in the group by the colour of its pretty white flowers, which clothed the graceful branches of a large plant. Cytisus racemosus was exceedingly large; and a specimen of acacia alata might be termed a tree.

2nd Prize, 10*l*., Mr. Barnes, gardener to G. W. Norman, Esq., Bromley.—This collection comprised many very remarkable plants, but, owing to the dulness of the weather, several best specimens were not well in bloom. We noticed a noble plant of Daviesia saligna, 4 feet in height and 6 feet in diameter, the branches drooping nearly to the pot, and loaded with bloom; supporting it on one side was Erica grandinosa, literally one dense mass of white flowers, 4 feet in height and the same in diameter; and on the other side was an immense bush, in excellent bloom, of Epacris grandiflora; another remarkable plant was Podolobium staurophyllum, 5 feet in height and 4 feet in diameter, and loaded with flowers; scarcely less interesting was a noble plant, not quite in bloom, of Oxylobium Pultenæa, about 4 feet in height and 6 feet in diameter; and a dense bush of Polygala oppositifolia, literally one mass of bloom, 4 feet in height and 6 feet in diameter, contrasting well with the yellow flowers which surrounded it. Of the genus Aphelexis, humilis was one mass of flowers, but the day was, unfortunately, not sufficiently bright to induce it to open its flowers; sesamoides was nearly 4 feet in height and 3 feet in diameter, but not so full of bloom; macrantha purpurea, certainly the finest of the genus, had deep purple or plum-coloured bracts shaded with bright pink or rose, exposing when open a deep straw-coloured or yellow disk. Phœnocoma prolifera, 2 feet in height and about 4 feet in diameter, which will probably be more generally recognised under the old name of Helichrysum proliferum; this plant was a complete thicket, but not sufficiently in bloom. Remarkable plants were Dillwynia rudis and clavata, but though plentifully covered with flower-buds, few of them were expanded; these excellent specimens were from 3 to 4 feet in height, and proportionatel bushy.

There were also fine plants of ericifolia and pungens. Gompholobium tenellum, Pimelea Hendersoni, Leschenaultia formosa, and Clerodendrum splendens were remarkably good specimens; the Gompholobium was about 3 feet in height and 2 feet in diameter, but not in full bloom; Pimelea Hendersoni was 18 inches in height and 2 feet in diameter, in fine bloom; and the Leschenaultia was of about the same size, trained hemispherically, and one complete sheet of flowers. Of Cape Heaths we noted the following: Thunbergia, a yard in height, and as much in diameter; intermedia, very large, and in excellent bloom; Hartnelli, a fine plant; Daphnæflora, beautiful; fastigiata lutescens, admirable, but smaller; odora rosea, good; prægnans coccinea minor, in a fine state; and lovely plants of dilecta and Sprengelii; a plant of Statice macrophylla; the rare Luxemburgia cilosa was shown for the second time since its introduction into this country; a good plant, with nearly thirty heads of bloom upon it, of Ixora grandiflora; and large specimens of Azalea Indica alba, splendens, Gladstanesii, and a pretty A. lateritia. Also fine plants of Zichya inophylla floribunda, Polygala cordifolia, Daviesia saligna, Boronia denticulata, Eriostemon cuspidatum, and Pimelea decussata, very large.

3rd Prize, 7*l.*, Mr. Green, gardener to Sir E. Antrobus, Bart.—These, though not so rich as the preceding, nevertheless enumerated some capital specimens, particularly the following: In Azaleas, Indica alba, 5 feet high, and clothed to the bottom; a tall specimen of the double red; and exquisitia. In Pimeleas, the best was decussata, about 2½ feet high and 3 feet in diameter, beautifully bloomed; rosea was a pretty compact bush. Amongst the Cape Heaths the more deserving were propendens, 3 feet high, producing, as it invariably does, a great profusion of blossoms; Beaumontiana, very pretty blush; and echiflora purpurea. Very distinct and remarkable was Daviesia latifolia, 4 feet high, full of bloom; and equally good was Coleonema pulchrum; Euthales microphylla, a mass of yellow blossoms; Brachysema latifolia, trained and full of bloom; Hovea Celsii, also trained and very full. A well-bloomed plant of Francescia latifolia; and a moderate specimen of Siphocampylus betulifolius.

### *In collections of 20 plants.*

1st Prize, 10*l.*, Mr. Frazer, nurseryman, Lea-bridge.—These were all very fine plants; among them was Podolobium staurophyllum, a dense bush, 2 feet in height and the same in diameter. In Pimeleas, linifolia was an admirable plant, 4 feet in height and 5 feet in diameter; nivea, very neat; and a remarkably well-grown and finely-coloured spectabilis. Boronia serrulata was about 18 inches in height and the same in diameter, and as compact and thickset as could possibly be desired; a good plant of Polygala acuminata, with Daviesia latifolia, 4 feet in height and 2 in diameter; Epacris grandiflora, Coleonema rubrum, Aphelexis speciosa, Chorozemas Henchmanni and varium; a most admirable plant of Boronia pinnata, loaded with delicate pale-pink waxy blossoms; with some good Azaleas.

2nd Prize, 7*l.*, Mr. Hunt, gardener to Miss Traill.—This collection contained a beautifully-trained specimen of Gompholobium polymorphum, covering a shield-formed trellis, 4 feet high by 4 feet broad; a splendid plant of Leschenaultia formosa, in fine bloom; Zichya villosa, good; Boronia serrulata and Gardoquia Hookeri, in fine bloom; excellent plants of Ixora grandiflora, Phœnocoma prolifera; and some good Cape Heaths, gemmifera, 3 feet high and as much in diameter; perspicua nana, very good; and translucens rosea, in admirable condition.

3rd Prize, 4*l.*, Mr. W. P. Ayres, gardener to J. Cook, Esq.—Though these plants were small, they were neat and compact; among them was a good-coloured specimen of Pimelea spectabilis, Azalea Indica alba, a compact round bush in good bloom; variegata, in good bloom; Poivrea coccinea, producing several strong spikes of rich flowers; Erica Hartnelli, in good bloom; a pretty dwarf bush of Ixora grandiflora, remarkable for the high colour of its flowers, with Gardoquia Hookeri, Chorozema angustifolium, and Leschenaultia Baxterii.

### *In collections of* 12 *plants.*

1st Prize, 7*l.*, Mr. Bruce, gardener to B. Miller, Esq.—For Azalea Indica variegata and Gladstanesii, both in fine bloom; Aphelexis humilis and sesamoides, fine; Chorozemas Henchmanni, varium and varium elegans, which latter appears a very free flowering variety; Pimelea spectabilis; Ixora coccinea, 5 feet high, and in fine condition; Leschenaultia formosa, Euphorbia splendens, and Adenandra speciosa, 2 feet high

**2nd Prize, 4*l*., Mr. Pawley, nurseryman, Bromley.—This collection had fine plants of Aphelexis sesamoides; Azalea variegata, dwarf, and Phœnicea, fine; Pimelea spectabilis, rather past its best; Ixora grandiflora, in a good state; Coleonema rubrum and Euphorbia splendens; with fine plants of Erica perspicua nana and ventricosa stellata.**

**3rd Prize, 1*l*. 15*s*., Mr. W. J. Epps, nurseryman, Maidstone.—**
Containing Ixora grandiflora, in good bloom; Leschenaultia formosa, pretty; Azalea Indica alba, large and in fine bloom; Begonia parviflora, well grown; a large specimen of Podolobium Chorozemæfolium, but rather past its best. A great drawback on this collection was a poor and wretchedly naked plant of Erica intermedia.

*In collections of* 6 *species.*

1st Prize, 4*l*., Mr. May, gardener to E. Goodheart, Esq.—For Ixora coccinea, 4 feet high, and having five heads of bloom; Erica mundula, a beautiful bush, 2 feet high by 3 feet across; Polygala acuminata, Pimelea spectabilis, Horea Celsi, 3 feet high, and full of bloom; and Leschenaultia formosa.

2nd Prize, 1*l*. 15*s*., Mr. G. Stanley, gardener to H. Berens, Esq. —For Clerodendron infornutatum, fine; Begonia parviflora, Tropæolum tricolor, trained to a wire shield; Zichya inophylla, Azalea Indica alba, and a famous specimen of Leschenaultia formosa, 2 feet high and near 3 feet in diameter.

3rd Prize, 1*l*. 5*s*., Mr. Cole, gardener to C. Lewis, Esq., Blackheath.—For Pimelea hispida, Gesneria Cooperi, an excellent plant; Polygala undulata, Epacris grandiflora, Correa speciosa major, good; and a Pimelea spectabilis, possessing remarkably fine heads of bloom.

4th Prize, 1*l*., Mr. Evan Jack, gardener to R. G. Lorraine, Esq.— For Azalea Gladstanesii, Gesneria zebrina, Chorozema Dicksonii, Elichrysum humile, Kennedia inophylla floribunda, a well-bloomed plant; and a beautiful bush, 4 feet high, of the neat and pretty Bossina linifolia.

A second 4th Prize, 1*l*., Mr. Glendenning, Chiswick Nursery, in which we observed a Pimelea spectabilis as finely bloomed as we ever saw.

5th Prize, 10*s*., Mr. Taylor, gardener to J. Coster, Esq., in which was a good plant of the delicate Erica Bowiana.

## STOVE OR GREENHOUSE CLIMBERS,

*In collections of 6 species.*

1st Prize, 4*l.*, Mr. Pawley, florist, Bromley, for very fine plants of the following: Tropæolum grandiflora, trained to a circular trellis, 4 feet in diameter, and full of bloom; Gompholobium polymorphum; a healthy plant of the fragrant Stephanotus floribundus, trained to an oval trellis; Clerodendron splendens coccinea, Kennedia monophylla, and Zichya inophylla, having a great profusion of flowers.

2nd Prize, 1*l.* 5*s.*, Mr. Frazer, nurseryman, Lea-bridge.—For Tropæolum Jarratti, a perfect specimen of health and beauty; Hardenbergia ovata, Zichya inophylla, Chorozema spectabilis, Hardenbergia longeracemosa, a beautiful specimen trained to a balloon-shaped trellis, and covered with its pretty lilac little blossoms; and the bright Zichya villosa.

3rd Prize, 1*l.*, Mr. Robertson, gardener to Mrs. Lawrence.—For Kennedia ovata, Stephanotus floribundus, a fine plant, 6 feet high, with numerous bunches of its sweet and handsome white flowers; Chlorea ternatea, Kennedia monophylla, Tropæolum edule, and Thunbergia chrysops, with two or three withered blooms.

## EXOTIC ORCHIDACEÆ,

*In collections of not fewer than 20 species.*

1st Prize, 20*l.*, Mr. Mylam, gardener to S. Rucker, Jun., Esq., For some very fine specimens.—We observed an excellent plant of Dendrobium densiflorum; a fine specimen of the lovely Sobralia macrantha, producing several of its handsome flowers; Chryseis bractescens, Vanda teres, Odontoglossum citrosmum, the singular Anguloa Clowesii, Coryanthes macrantha; an immense plant of Acanthophippium bicolor, whose flowers covered the entire surface of the pot; Saccolabium guttatum, a fine plant, with three spikes of bloom; Oncidium pulchellum, Cattleya Mossiæ, Bifrenaria tyrianthina, Cymbidium lancifolium, Oncidium pumilum, with yellow flowers; O. leucochilum, Lycaste Deppii, Stenia pallida, with pale yellow flowers; and Epidendrum macrochilum.

2nd Prize, 10*l.*, Mr. Robertson, gardener to Mrs. Lawrence, containing, among other things, the lovely Dendobrium Cambridgeanum, D. densiflorum, a fine plant, but nearly out of flower; Saccolabium guttatum, and præmorsum, with several spikes of bloom; Epidendrum bicornutum, E. vitellinum, and Bifrenaria tyrianthina.

3rd Prize, 7*l.*, Messrs. Rollisson, nurserymen, Tooting.—We observed the curious Trichopilia tortilis, Cattleya Mossiæ, Acineta Barkeri, Maxillaria Deppii, aromatica and vitellina, Aerides crispum, Cœlogyne undulata, Brassia maculata, and Maxillaria tenuifolia.

*In collections of* 12 *species.*

1st Prize, 10*l.*, Mr. Don, gardener to G. Cox, Esq., Stockwell.—We noticed three small plants of Aerides crispum, pretty; A. crispum pallidum, Brassia maculata, a new species of Oncidium, resembling O. papilio, but with the lip beautifully fringed; Lycaste Deppii, Bifrenaria aureo-fulva, very pretty; and Acineta Barkeri, an excellent specimen.

2nd Prize, 7*l.*, Mr. Williams, gardener to C. B. Warner, Esq., Hoddesden.—The most striking were, Dendrobium cærulescens, D. moschatum, Cattleya sp., very handsome; Epidendrum macrochilum and variegatum, and Aerides crispum.

*In collections of* 6 *species.*

1st Prize, 7*l.*, Messrs. Veitch and Son, nurserymen, Exeter.—These were all fine plants, particularly Dendrobium calceolaria, 4 feet in height; Cattleya Mossiæ, very fine; Oncidium ampliatum majus, in fine bloom; and Odontoglossum hastatum.

2nd Prize, 4*l.*, Mr. Eyles, gardener to Sir G. Larpent, Bart.—We noted Vanda Roxburghi and V. Roxburghi cærulea, Oncidium altissimum and luridum.

3rd Prize, 1*l.* 15*s.*, Mr. R. Plant, gardener to J. Schroeder, Esq., Brixton, containing a small specimen of Dendrobium densiflorum, with four spikes of bloom, Trichopilia tortilis, Vanda cristata, pretty; and Cattleya Skinneri.

Besides the above, Mr. Hunt, gardener to Miss Traill, showed a collection, in which was an Oncidium from Honduras, with curious dark-brown variegated flowers; O. luridum guttatum; and a large plant, not much in bloom, of Cymbidium aloifolium.

### GREENHOUSE AZALEAS,

*In collections of* 12 *distinct varieties.*

1st Prize, 7*l.*, Mr. Green, gardener to Sir E. Antrobus, Bart.—

This was a collection of magnificent specimens, comprising Indica pallida, large pale purple, 5 feet high and full of bloom; speciosissima, bright rose with crimson spots, 4 feet, bushy; Greenii, purple with red spots, 6 feet; semi-double scarlet, fine red, having upper petal crimson, 6 feet; Gladstanesii, white, one of the best shaped flowers, 4 feet; Rawsonii, deep bright purple, 5 feet high and 4 feet in diameter; lateritia, light red, fine shape, 4 feet; variegata, 4 feet; Indica alba, 5 feet high and the same across; rubra plena, 7 feet high by 4 across; splendens, bright salmon red, 4 feet high and 5 feet across; and Smithii coccinea, 6 feet high.

2nd Prize, 4*l.*, Mr. Falconer, gardener to A. Palmer, Esq., Cheam, for a scarcely less interesting collection, consisting of Bianca, white; Agnes, red; Theresa, crimson; Danieliesii, Emmelina, purpurea superba, Variegata, double red, Indica alba, pulchra, Rawsonii, and lateritia.

3rd Prize, 1*l.* 15*s.*, Mr. Robertson, gardener to Mrs. Lawrence, for Phœnicia, leucomegiste, Rawsonii, splendens, amabile, pulchra, 6 feet high, very full of bloom; conspicua purpurea, Indica alba, Danieliesii, a mass of bloom; speciosissima, variegata, and Smithii coccinea.

4th Prize, 1*l.*, Mr. Gaines, nurseryman, Battersea, exhibited a collection, but as they were grown in small pots the plants were only moderate; amongst them we saw admirable excelsa and delicata.

*In collections of* 6 *distinct varieties.*

1st Prize, 4*l.*, Mr. Frazer, nurseryman, Lea-bridge, for a very pretty specimen of lateritia, coccinea superba, Indica alba, sinensis, Phœnicia, and splendens, all beautifully managed.

We did not observe any other prizes awarded. Mr. Smith, nurseryman of Norbiton, however, had a collection of small plants, in which Alberti and Venusta were striking varieties, the former salmon-red with a crimson eye; conspicua purpurea and violacea superba were good, and Modesta and Edmondsi semi-double varieties.

### TALL CACTI,

*In collections of not less than* 6 *distinct varieties.*

1st Prize, 7*l.*, Mr. Green, gardener to Sir E. Antrobus, Bart., we observed a fine Epiphyllum speciosum, E. Ackermanni and Ackermanni grandiflorum, and E. coccineum cæruleum.

No 2nd Prize awarded.

3rd Prize, 1*l.* 15*s.*, Mr. J. Bruce, gardener to B. Miller, Esq.—The most remarkable specimens amongst these was, Cactus Mallisonii rosea and Epiphyllum speciosum.

### FUCHSIAS,

*In collections of* 12 *very distinct varieties, of which one-half shall have a light calyx.*

1st Prize, 1*l.* 15*s.*, Mr. A. Kendal, nurseryman, Stoke Newington, for Stanwilliana, Robusta, Chandlerii, Coronet, Erecta elegans, compact and pretty; Vesta, Gigantea, Juliet, Defiance, Globosa grandiflora, Young May-morn, light salmon and crimson; and Venus Victrix.

2nd Prize, 1*l.* 5*s.*, Mr. Gaines, nurseryman, Battersea, for a good and distinct collection of well-grown and bushy plants, deserving a better prize: the sorts were—Duke of Wellington (Epps), Coccinea vera, Modesta, Coronet (Smith), Madonna (Harrison), Goldfinch (Harrison), Priam (Gaines), Britannia, Duke of Wellington, Vesta, Monarch, and Rembrandt.

The only two collections shown.

### CINERARIAS,

*In collections of* 12 *distinct varieties.*

1st Prize, 1*l.* 5*s.*, Mr. Ivery, florist, Peckham, for Beauty of Winham, Nosegay, Red Rover, Compacta, Regina Victoria, carmine; Wie Pet, Captivation, Criterion, Fanny Elsler, Pride of Peckham, white with purple disk; Beauty of Cyston, and Eclipse.

2nd Prize, 1*l.*, Messrs. Lane and Son, nurserymen, Berkhampstead, for well-bloomed specimens of the following:—Enchantress, Regina Victoria, Mello Park, Conspicua, Unique, Spectabilis, Tulgidum, Eclipse, Laverstonia, white with a bright deep crimson tip and fine shape; Diana, good shape; and Splendens, a loose starry flower.

3rd Prize, 10*s.*, Mr. Taylor, gardener to J. Coster, Esq., Streatham.—The best amongst these were Perfecta, King, Grand Duke, Emperor, Pride of Peckham, Prince of Wales, and Beauty of Cyston.

### Miscellaneous Subjects.

*Rhododendrons.*—Collection of 10 varieties. Prize 4*l.*, Mr. Smith, nurseryman, Norbiton. These were remarkable for their strong growth and fine trusses of bloom; the flowers individually were considerably larger than those of the generality of Rhododendrons: the finest of them were Elven, fine large salmon; Burlingtonium aureum, lemon colour with dark orange spots; flavum superbum, nearly of the same colour, but a trifle darker; ornatum, of the same colour, slightly tipped with rose; Jenkinsoni, shaded with pink; aureum superbum, very large; cupreum ochræ, shaded with purple; these were the most distinct kinds, but the others may be cultivated in large collections, viz., Salmonium, Broughtonianum, and Mundulum.

*Hydrangea japonica.*—Prize 1*l.* 5*s.*, Mr. J. Robertson; a large luxuriant bush.

*Statice macrophylla.*—Prize 1*l.*, Messrs. Forrest and Co., nurserymen, Kensington. Of this very good variety, three remarkably healthy plants were shown, each having several spikes from 2 to 3 feet high, of fine blue-p[illegible]ers.

*Tulips.*—Two stan[illegible]4 blooms, were shown, but no prize awarded. Messrs. [illegible]sts, Woolwich, had good blooms in their stand, of Holmes[illegible]lam's Maria, Violet Alexandre, Polyphemus, Sir R. Peel, and a pretty small bloom of Triumph Royal. Mr. Henbury, florist, Croydon, exhibited the other which was only a very moderate one.

### Single Specimens

of stove or [illegible] a very [illegible]

Three first prizes, of 4*l.* each [illegible] for magnificent specimens of the following:—

1. Saccolabium guttatum, to Mr. C. Roe, gardener to J[illegible] Esq., High Grove, Reading [illegible] of this kind of orchidaceous [illegible] cular wire basket, 3 feet in diameter, and about [illegible] basket was filled with sphagnum, in the centre of which [illegible] was placed, spreading gracefully to the sides, its [illegible] reclining upon the moss. This was one of the [illegible]

2. Aerides odoratum, to Mr. Basset, gardener to R. S. Holford, Esq.—This was a magnificent plant, ornamented with about 20 large spikes of bloom upon it, and being one of the loveliest species of orchideæ, was very attractive.

3. Azalea variegata, to Mr. Falconer, gardener to A. Palmer, Esq.—This certainly was the best bloomed specimen of this showy plant we ever saw ; the plant was about 3 feet high, and from 4 to 5 feet in diameter, the branches drooping over the sides of the pot, forming a depressed cone, and covered with a complete sheet of bloom, so that scarcely a green leaf was perceptible.

No 2nd Prize was given.

3rd Prize, 1*l.* 5*s.*, Mr. May, Woodford, for Chorozema Henchmanni, 2 feet, profusely in bloom.

Three 4th Prizes, of 1*l.* each, were awarded to the following:—

1. Eriostemon buxifolium, Messrs. Veitch and Son, Exeter, in fine bloom.
2. Boronia serrulata, Mr. R. Pool, Leyton, 2 feet high, bushy.
3. Ixora coccinea, Mr. J. Bruce, gardener to B. Miller, Esq., 4 feet high.

Five 5th Prizes, of 10*s.* each, were awarded :—

1. Kennedia monophylla, Mr. J. Hill, gardener to T. Davis, Esq., 4 feet, well bloomed.
2. Boronia serrulata, Mr. Hunt, gardener to Miss Traill, 4 feet high, trained in a balloon shape, full of bloom, and a good specimen of excellent culture.
3. Brugmansia Knightii, Mr. Cole.
4. Thunbergia chrysops, Mr. Green, gardener to Sir E. Antrobus.
5. Ditto ditto Mr. Robertson, gardener to Mrs. Lawrence.

In addition to the above, we observed Gloxinea Cartonii, a pretty variety from Mr. Beck, Clerodendron infornutatum from Mr. Jack, Pimelea spectabilis from Mr. Bruce, with some others.

### NEW OR EXTREMELY RARE ORNAMENTAL PLANTS.

No 1st or 2nd Prizes were awarded.

Two 3rd Prizes, of 1*l.* 5*s.* each, were adjudged for—

1. Chlorœa chrysantha, Mr. Cameron, Birmingham Botanical Garden, a rare plant, inhabiting the hills of Chile, and now blooming

for the first time in Europe; it has rich yellow flowers, and the habit of an European orchis.

2. Franciscea Pohliana, Messrs. Veitch and Son, Exeter, figured in our present number.

4th Prize, 1*l.*, Daviesia cordifolia, Mr. J. Robertson, a new and pretty flower, but wanting compactness in habit.

Three 5th Prizes, of 10*s.* each, were awarded—

1. Odontoglossum cordatum, Messrs. Booth, nurserymen, Hamburgh, a small plant not remarkable for its beauty, but very rare.

2. Tropæolum Lobbii, Messrs. Veitch and Son, an excellent new species with bright orange-scarlet flowers.

3. Siphocampylus, nova spec: Messrs. Veitch and Son, of which see our description in Art. I.

In addition to the above we observed a specimen of Tropæolum Brickwoodii from Mr. G. Stanley (see our figure), a seedling Zichya, named longipedunculata, of good habit, and having small bright red flowers, from Mr. J. Agate, Croydon; and a seedling Gesneria, called macculata, from Mr. Stedman, Isleworth.

## Seedling Florist's Flowers.

### 1844.

*Pelargoniums.*—Prize 1*l.*, Rosy Circle, Mr. Beck, Isleworth; a rather small but compact flower of good shape, with short well-formed petals, smooth on the edge; lower petals broad, of a rosy pink, with the centre blush-white; top petals crimson, with a dark blotch, softening to the edge and terminating in the centre without the feather; the flower is stout, and retains its form well; the plant is of good habit, an abundant bloomer, and will make a good show variety.

Ditto. Prize 1*l.*, Arabella, Mr. Beck; a fine shaped flower, with a pure white centre, the lower petals rosy colour; the upper petals have a large dark spot gradually softening towards the edge; a clear and good coloured variety, and if it can be grown free from a disposition to notch in the upper petals, which we observed in the specimen, will prove an excellent show flower.

Ditto. Prize 1*l.*, The Pearl, Mr. Catleugh, florist, Chelsea; this is a clear white flower, and as good whites are greatly wanted, we admit this to be an acquisition, though it is not so good in shape as to have passed in a more general colour, and the crimson spot is too small.

*Calceolaria.*—Prize 10*s.*, Exemplar, Mr. Kinghorn, Twickenham; a flower of fine form, the ground colour is a canary-yellow, small spots of which are seen only, the surface of the flower being nearly covered by bright-brown, and still deeper brown spots.

*Cineraria.*—Prize, 10*s.*, Smithii, Messrs. C. D. Smith and Co., Pimlico; a tolerably good flower, of a distinct purple colour.

1845.

*Pelargonium.*—Prize 10*s.*, Mount Etna, Mr. Hoyle, Jersey; a flower of brilliancy and richness in colour, the lower petals deep rosy-red, the top petals have the spot surrounded by a broad margin of crimson scarlet; the flower is well formed, except some roughness about the margin of the upper petals.

Ditto. Prize 10*s.*, Isabella, Mr. Hoyle; this too lacked smoothness of the margin, the top petals are deep velvety maroon, with a narrow edge of pink; centre light, with the remaining portion of the lower petals of a rosy purple.

The next exhibitions take place on June 21 and July 12.

Our next number will contain a report of the Royal Botanic Society's show.

## ARTICLE VI.

## ON RAISING RANUNCULUSES FROM SEED.

BY A FLORIST.

SHOULD you think the following worthy a place in your Magazine, I should feel obliged by your inserting it in an early number.

Ranunculus seed is to be procured from semi-double flowers; care should therefore be taken to save it from such as are possessed of good properties, viz., such as have full strong stems, a considerable number of large well-formed petals, and rich good colours, chiefly preferring the darker, but not to the exclusion of the lighter coloured when their properties answer the foregoing description. The seed should remain on the plant till it has lost its verdure, and becomes brown and dry; it may then be cut off, and be spread upon paper, in a dry room, exposed to the sun, that every degree of humidity may be exhaled from it, in which state it should be put into a bag, and preserved in a dry warm room till the time of sowing, otherwise it will be in danger of contracting a dampness, which will soon produce a mouldiness that will infallibly destroy it. January is the proper time to sow the seed; and in order to prepare it, it must be separated from the stalks to which it is connected in the following manner, viz.: in the first place it should be taken out of the bag and spread thin upon paper, tea tray, &c., and placed before a moderate fire, till it is just warm, and no more; the seed will then easily scrape off, by means of a penknife; but great care must be taken to avoid scraping it off in lumps, or suffering any pieces of the stalk, dried petals of the flower, or other extraneous matter to be mixed with it, which would create a mouldiness, when sown, of very destructive consequence; when the seed is scraped in a proper manner it will have the appearance of clean coarse bran, with a little brown or purple speck in the centre of each cuticle, which is the kernel.

When the seed is thus prepared, it should be sown on a shallow frame provided with glasses, similar to those made use of for cucumbers and melons; the soil should have been previously taken out, three feet deep, and spread thin upon the ground till it has been perfectly frozen throughout, in order to destroy any vermin it may have contained. When the pit is filled up again with the frozen lumps of earth, it should remain till the whole mass has thawed and subsided to its pristine bulk, or nearly so; its surface should then be made perfectly smooth and even, and the seed sown upon it with the utmost regularity, in such a quantity as nearly to cover it; the glasses should be placed over it immediately, and the frame kept closely covered with them, for two or three days, till the seed begins to swell and soften; a little light earth should then be sifted upon it, through a fine sieve, but not sufficient to cover it; this should be repeated once or twice a week, till the greater part of the seed disappears: it is proper to remark that such seeds as happen to be covered deeper than the thickness of a half-crown piece will never vegetate, and must, of course, inevitably perish. It is necessary that the seed be kept moderately moist by gentle watering with soft water that has been exposed to the sun, but too much moisture is nevertheless injurious.

About the time that the plants begin to appear, it is requisite to stir the surface of the earth with a pin, just sufficiently to admit air, and give liberty to the young plants to pass easily through; this operation should be very carefully performed to prevent breaking off the fibres, or raising and leaving any of the plants out of the earth, because one hour's sun upon such would certainly destroy them.

After the plants are all up, and their two interior leaves appear, more air must be given, by having hurdles or lattice work substituted for the glasses; watering must be regularly continued in the manner before described, when the long continuance of dry weather renders it necessary; but fine warm showers of rain are always preferable when they happen in due time.

This kind of management is to be continued till the roots are matured, and fit to take up, which is known by the foliage becoming brown, dry, and nearly consumed. The roots are to be dried and preserved in the usual way, and to be planted the same time as large ones in the autumn; the greater part, or such as have two or more claws, will blow in tolerable perfection the following summer.

## ARTICLE VII.

### ON THE CULTURE OF LOBELIAS.

BY AN AMATEUR FLORIST.

genus Lobelia comprises plants of much interest to an admirer of flowers: some of them exhibiting blossoms strikingly elegant, brilliant, and beautiful, and of a commanding figure in stature; whilst others, more humble in growth, are equally pretty and pleasing. In the former class, the plant rears up its splended spike of the richest possible hue; the other, in prostrate beauty, displays a carpet of simple, yet engaging elegance.

Thinking a few hints on the culture of a number of the Lobelias would be acceptable to the readers of the CABINET, induced me to draw up the remarks here transmitted for insertion therein.

The Lobelia was so named by that eminent French botanist Father Plumier (who discovered the first species of it in America), in honour of Dr. Lobel, a learned botanist, who published the figures of a great number of plants at Antwerp, in 1581, and two or three other gardening books before that time. The genus is now ranked in the class Pentandria, and order Monogynia, although formerly classed in

Syngenesia. The natural order is Lobeliaceæ, very closely allied to Campanulaceæ, from which their colour alone distinguishes them.

Lobelia cardinalis and siphilitica are natives of Virginica; fulgens and splendens, natives of Mexica; to which must be added the following hybrid productions raised in this country, viz., fulgens multiflora, lateritia, refulgens, pyramidalis, Queen Victoria, grandis, Bathania, Chalmeri, topaz, longiflora, longifolia, siphilitica alba, Altontowriensis, Milleri, purpurea nigra, coccinea, coccinea superba, densiflora, dentata, and cærulea. These are upright growing kinds in the way of L. fulgens; they are most beautifully distinct in colours, and blooming from the beginning of June to the end of October, are exceedingly valuable as ranking among the most striking ornaments either to adorn the greenhouse or flower garden. Lobelia salicifolia, speciosa, and Tupa, are handsome, but generally require the protection of a greenhouse.

All Lobelias are poisonous, though some have been used medicinally, as Lobelia siphilitica; hence its name. L. cardinalis is used as an Anthelmintic, or destroyer of worms. L. inflatus, a very active emetic,—I believe the most active known. L. Tupa yields a dangerous poison; the smell frequently causes headaches. L. longiflora is a most venomous plant; when taken inwardly nothing can stay its effects, and death is the sure consequence. I have inserted these remarks, more closely allied to botany than other parts of gardening, as a warning to any inexperienced persons (whom the splendid colour of the flower might deceive), considering that the names of all, and more especially such dangerous plants, cannot be too fully pressed upon every one's memory.

L. cardinalis and siphilitica can be propagated in the best manner from seeds, which ripen well in this country. All the other sorts I have named above can be propagated from seeds, offsets, and cuttings. I take off the suckers in October, and put each one in a pot, protecting them in a frame during the winter, forcing them gently on a dung hotbed, and shifting the plants into larger sized pots at various times as they require it. The compost I use is made up of yellow loam and a small quantity of leaf mould and sand mixed with it. The period when they require this repotting is from February to May. At the commencement of the latter month I remove them into a greenhouse, retaining such as I purpose for ornamenting the house during summer, and harden the others gradually to bear the full exposure of the open air. By this time they will have just begun to push forth flower-stalks; and some of the hardened plants must then be placed in water—if there is the convenience of an Aquarium, so much the better; if not, a saucer filled with water is a very good substitute. Other plants must be planted out of pots in the open beds of the flower garden, keeping the balls as entire as can be done. They will begin to flower in June, and, if shaded, will last for many months in brilliant bloom. Shading is a general rule for all high-coloured flowers, such as Trevirania coccinea, Crassula coccinea, &c.

Propagation, by cuttings, is very frequently adopted. In June, take a young stalk, and divide it into lengths of five or six inches each; plant them under a hand glass, upon a border having an eastern exposure; water occasionally. Cuttings thus put off, strike with remarkable facility, and will be well rooted in a month, when the young plants may be managed as above directed.

As the plants always bloom the first or second year, it is the best plan to raise a good supply from seed. It should be sown immediately after it is ripe, and be protected under a frame. In the spring the seeds will begin to vegetate and the plants appear; they should be transplanted into pots, and repotted as they require it during the year. The spring following they should be put into pots sufficiently large to give full scope to their roots, when they will be in flower about July.

The suckers should be taken off every autumn; for, if this is neglected, the plant will very likely be lost, as the stem will die down and rot; thereby weakening, if not destroying, the growing plants.

With the little trouble in culture above described, they will form one of the greatest ornaments in the flower garden. I have them frequently four feet high.

## ARTICLE VIII.

### METHOD OF OBTAINING DWARF PLANTS OF THE CHINESE CHRYSANTEMUM.

BY CLERICUS.

THE following easy method of obtaining dwarf plants of the above beautiful autumn flower I have practised with success last season, and I believe it is not generally known. In the month of September, when the plants have begun to show the flower-bud, take those from which you want to have dwarf ones, and tie some moss and mould round the stalk, about a foot or half a foot (according to the height of the plant you desire) from the head of the plant; tie it round tight, and in a fortnight roots will strike to the moss, when it may be taken off and potted; by this means you will have a pretty dwarf plant at once, without much trouble. I have this season several of the tall growing kinds in pots about a foot high, looking extremely beautiful.

## REVIEW.

*The Lady's Country Companion, or, How to enjoy a Country Life rationally. By Mrs. Loudon, author of "Gardening for Ladies, &c.,"* with an Engraving on Steel, and Illustrations on Wood. London, Longman and Co., 1845.

*(Continued from p. 136.)*

I will now tell you how I would plant the beds. As this is the beginning of April, and as I wish your garden to look well immediately, I would advise you to get a few pots of Californian and other annuals, usually raised in pots, from the nurseryman at the neighbouring town, and to plant them, putting three potfuls in each bed, but no more. In No. 1 put Phlox Drummondi, the flowers of which are crimson of various shades, and let the stems be pegged down so as to spread over the bed. No. 2 may be Lasthenia californica, the flowers of which are yellow, and the stems generally procumbent; but they may be pegged down to keep them in their proper places, that is, to spread completely and regularly over the bed. No. 3 should be Nemophila insignis, the flowers of which are of a beautiful blue, and which will not require pegging down. No. 4 may be Erysimum Petrowskianum, the flowers of which are of a bright orange, but the stems must be pegged down, or they will grow tall and straggling. No. 5 may be Nolana atriplicifolia, the flowers of which are blue, and resemble those of a convolvulus; this is a procumbent plant, and will not require pegging. No. 6 may be nemophila atomaria, which has white flowers, and is a dwarf plant. No. 7 may be Leptosiphon densiflorus, a dwarf plant, with pale purple flowers. No. 8 may be Gilia bicolour, a dwarf plant, with nearly white flowers. No. 9 may be Clintonia pulchella, a beautiful little plant with blue flowers. No. 10 may be Gilia tricolor, a dwarf plant, the flowers of which are white and very dark purple. No. 11 may be Leptosiphon androsaceous, a dwarf plant, with pale lilac flowers; and No. 12 Schizopetalon Walkeri, the flowers of which are white, and the stems must be pegged down. These are all annuals, which, if properly treated by pegging down, and not planted too close, will produce a mass of flowers in each bed only just above the surface, and will have a pretty effect from the windows. Most of them like a poor clayey soil best, and they will only require turning out of the pots without breaking the ball, into the places prepared for them.

If you think there are too many white beds, you can substitute Sanvitalia procumbens, the flowers of which are yellow, for No 8, but the seeds must have been sown the previous autumn to bring it forward, as otherwise it will not flower till late in the summer; and Bartonia aurea, the flowers of which are of a golden yellow, may be planted instead of No. 12. Cladanthus arabicus, formerly called Anthemis arabica, which has yellow flowers, may be planted in No. 8, if Sanvitalia cannot be obtained.

I do not think you have ever told me what soil yours is, and perhaps you hardly know. You will, however, easily recognise gravel or chalk; if the soil be red, it is probably, if loose, a sand, and if close, a marl; a peaty soil is black and loose, and a clay may be known by water standing in little pools after rain without running off. This is one of the worst soils for gardening purposes, but it may be improved by mixing it with sand.

I shall now give you a list of half-hardy plants for autumn, as most of the annuals will begin to look shabby in July or the beginning of August. No. 1, Verbena Melindres, bright scarlet; No. 2, Œnothera Drummondi, yellow; No. 3, Lobelia bicolour, blue; No. 4, Calceolaria rugosa, pegged down; No. 5, Verbena Tweediana, crimson; No. 6, common White Petunia; No. 7, Verbena Arraniana, or Henderson's purple; No. 8, Calceolaria integrifolia, yellow; No. 9, Purple Petunia; No. 10, Verbena teucrioides, white; No. 11, Frogmore Pelargonium, bright scarlet; No. 12, Musk plant, yellow.

In October the following bulbs and other plants may be put in for flowering in early spring. No. 1, Von Thol Tulips; No. 2, Cloth of Gold, or common Yellow Crocuses; No. 3, Blue Hepatica;

No. 4, Yellow Crocuses, or White Anemone; No. 5, Scilla verna and sibirica, blue; No. 6, Arabis albida, white; No. 7, Double Pink Hepatica; No. 8, Winter Aconite; No. 9, Purple Crocuses; No. 10, Snowdrops; No. 11, Primroses; No. 12, White Hepatica, or Arabis alpina.

If you do not like the plan for a garden which I have sent you, you can draw one according to your own fancy, of any figure you like; but as I believe you have not yet a regular gardener, it will be necessary to teach you how to transfer the plan you have decided upon from the paper to the ground. In the first place the ground must be dug over, raked, and made perfectly smooth. The pattern, if a complicated one, must then be drawn on Berlin paper, which is covered with regular squares, and the ground to be laid out must be covered with similar squares, but larger; the usual proportion being, that a square inch on the paper represents a square foot on the ground. The squares on the ground are usually formed by sticking in wooden pegs at regular distances, and fastening strings from peg to peg, till the whole ground is covered with a kind of latticework of string. Each string is then chalked, and made to thrill by pulling it up sharply and letting it go again, which transfers the chalk from the string to the ground. When the ground is thus covered with white squares, it is easy to trace upon it, with a sharp-pointed stick, any pattern which may have been drawn on the paper; the portion in each square on the ground being copied on a larger scale from that of the corresponding square on the paper.

Simple patterns, consisting of straight lines, need only to be measured, and pieces of string stretched from pegs put in at the proper distances, so as to form straight lines, oblongs, squares, triangles, or diamonds. If a circle is to be traced, it is done by getting a piece of string half the length of the diameter of the circle, with a piece of stick tied to each end. One stick is then driven into the ground in the centre of the circle, and a line is traced with the stick at the other extremity of the string, which is drawn out quite tight. An oval is made by tracing two circles, the circumscribing line of one of which just touches the centre of the other; short lines are afterwards made at the top and bottom, and the central lines are obliterated. A square only requires a peg at each corner, with a chalked string drawn from peg to peg; and an oblong or parallelogram is made by joining two common squares, and taking off the corners, if required.

Suppose a garden is composed of a bed in the centre for a tree rose with a circle of dwarf roses; a gravel walk surrounds these; and there are five heart-shaped beds, which may be planted with Scarlet Pelargoniums, yellow Calceolarias, Petunias white and purple, and tall yellow Mimulus; and the crescent-shaped beds, which are on grass, may all be planted with different kinds of Verbenas. This plan is also a good design for a rosery, the roses to be planted in the beds, and in the half crescents, which must be on grass, with gravel walks between the grass plots.

All the beds intended for bulbs and half-hardy plants should be particularly well drained; and the best way of doing this is, to dig out the soil to the depth of two feet or more, and then put in a layer of brick-bats and other rubbish, to the depth of nine inches or a foot. On this should be placed a layer of rich marly soil, in which the bulbs should be planted. Dahlias, hollyhocks, and other tall-growing, showy-flowered plants, should have similar beds prepared for them, but the soil should be made very rich by the addition of the remains of an old hotbed, or some other kind of half-rotten animal manure.

You will observe, that when I give directions for planting the beds in any of the plans I send you, I merely say what may be done, and not what is absolutely necessary. Indeed, it will be better for you to vary the flowers as much as possible, according to your own taste, provided you take care that the plants are, as nearly as you can contrive it, of the same height, or that they rise gradually, and that you contrast the colours well. The rule in the latter case is, always to put one of the primitive colours (red, blue, and yellow) next another of these colours, or some colour compounded of the other two; using white wherever you cannot find any handsome plants of a colour that will suit the bed you want them for. Thus, for example, if you plant one bed with red, you may plant the next with blue, yellow, green, hair-brown, or white, but never with any shade of purple, as red enters into the composition of that colour; nor with any shade of reddish brown; purple, indeed, must always be next yellow, hair-brown, or white, but never next blue, red-brown, or red. Orange will not look well near yellow or red; and lilac must not approach blue or pink. A little practice will do more than any lengthened details; generally speaking, you may take the same taste to guide you in arranging the colours of the flowers in your parterre that you use in choosing the colours of your dresses; and if you are in any doubt, you have only to colour the beds in the plan, and see how they look; or to stick coloured wafers on a piece of paper, for the same purpose.

When you have settled what to plant in the beds of your garden, supposing you to choose the plan, you must next think of the beds round it. I should advise these to remain unplanted, unless they are sown with mignonnette, or something of that kind. The shrubberies, I have already stated, should, I think, consist chiefly of the finer kinds of hardy evergreens; at least that should which is opposite the windows of your sitting-room. The other shrubbery, which is intended to unite the garden scenery with that of the park, may be planted with rhododendrons, acacias, and kalmias; the rhododendrons being farthest from the walk, and carried a little out into the park, so as to make a broken line, projecting in some places, and receding in others, and here and there mixed with bushes of phillyrea, alaternus, holly of various kinds, and cratægus, so as gradually to mingle with the clumps of trees in the park. On the side next your room, if there are to be beds under the windows, there should be spaces left in them which should be gravelled, so that you may throw the window open, and not only walk out on gravel, but walk round the garden on gravel also. This you will find a great convenience if the weather should be wet, though you must not mind going upon the grass, if you are to be a real gardener, and to attend to the flowers in the regular beds. With regard to the beds near the house, I would have a Lonicera flexuosa trained over each window, on account of its delightful fragrance in summer; for a similar reason I would have Chimonanthus fragrans against the walls between the windows, and mignonnette and violets in the beds.

I think nothing can be more delightful than to throw open your window, and to inhale a refreshing odour from growing flowers when they are swept over by a balmy breeze, particularly after a slight shower; and, for this purpose, I would strongly recommend you to plant flowers near your windows which have a refreshing, but not a heavy scent. The flowers of the evergreen magnolia, and those of the orange, have an oppressive fragrance, as have those of the heliotrope and the tuberose; but those of the mignonnette, the lemon-scented verbena, the rose, the violet, and Lonicera flexuosa are refreshing, at the same time that they yield a delicious perfume.

I must now give you some hints on cultivating your flowers. To begin with the *bulbs*, as they flower first in spring. The crocuses and snowdrops should be planted, five or six together, as close as possible, so as to form little tufts; and these, when once planted, should never be removed, unless they should grow out of bounds, so as to spoil the shape of the bed. The tulips, on the contrary, should be taken up as soon as their leaves begin to decay, and kept in a dry place till the proper time for planting them next year.

You must observe that there are three kinds of plants which are said to have bulbous roots: those which are solid, and which should be properly called corms, such as the crocus, the corn-flag, and many of the half-hardy plants with similar half-tubular flowers; the tunicated bulbs, which may be peeled off in scales, such as the onion, the hyacinth, and the tulip; and the scaly bulbs, such as the lily. Now the real roots of all these plants are the long fibres sent down by the lower part of the bulb, which may be seen plainly in hyacinths grown in glasses, and in any of the kinds if taken up while in a growing state; and what is called the bulb is, in all the corms, only a contracted stem; but, in the tunicated and scaly bulbs, the bulbous part is formed of a contracted stem and metamorphosed leaves. If you will take the trouble to examine a hyacinth, you will find at the base of the bulb a flat fleshy substance, called the root-plate, and this is, in fact, the contracted stem of the plant; while the tunics or scales are metamorphosed leaves. In the scaly bulb the stem is plainly perceptible in the centre, and the scales are evidently metamorphosed leaves. You will easily remember these distinctions, and you will find it useful to attend to them in cultivating your garden, as all plants having corms never flower well till they have been allowed to form a mass, which they will not do till they have been in the ground three or four years.

(*To be continued.*)

# PART II.

## LIST OF NEW AND RARE PLANTS.

Arctostaphylos nitida. Shining-leaved Bearberry. (Bot. Reg. 32. Ericaceæ. Decandria Monogynia. A hardy evergreen shrub, obtained from Mexico by G. F. Dickson, Esq. It has bloomed in the garden of the London Horticultural Society. It usually blooms in May, and again in Autumn. The shrub grows to five or six feet high. The flowers are numerously produced, in large terminal branching panicles; each blossom similar in size to the Irish Heath; and, being white, give a very pleasing appearance. It deserves a place wherever it can be grown.

Bolbophyllum Careyanum. Dr. Carey's. (Bot. Mag. 4166.) Orchidaceæ. Gynandria Monogynia. A native of Nepal, and has recently bloomed in the Royal Gardens at Kew. It is more curious than showy. The flowers are very small; yellow, with red spots.

Cajanus bicolor. Two-coloured Pigeon Pea. (Bot. Reg. 31.) Leguminosæ. Diadelphia Decandria. (Synonym Cytisus Cajan.) Seeds of this Pea were collected near to the town of Jellalabad, at the period of the place being so nobly defended by a portion of the Indian army, under the command of Sir R. Sale. Plants have bloomed in the garden of the London Horticultural Society. It is a half-hardy annual, or biennial; growing half a yard high; blooming freely during the summer months. The inside of the flowers is a pale sulphur, and the outside red, with yellow streaks. Each blossom is about half the size of a Sweet Pea flower.

Combretum latifolium. Broad-leaved. (Pax. Mag. Bot.) Combretaceæ. Octo-decandria. A native of the East Indies. It has bloomed vigorously in the collection of Mr. Henderson, at Pine Apple-place Nursery, London. It is an evergreen climbing shrubby plant, having a striking resemblance to C. grandiflorum; but the spikes of the flowers are rather shorter, and the stamens are not so long. The flowers are of a rich crimson red. The plant is much more robust than C. grandiflorum. It is a fine plant for covering a trellis, or a pillar.

Dendrobium Kingianum. Captain King's Dendrobium. (Pax. Mag. Bot.) Orchidaceæ. Gynandria Monandria. A native of New Holland, and has bloomed in the collection of Messrs. Loddiges. The plant is dwarf. The flower-stems rising from four to six inches high; each producing three or four blossoms; a separate flower is about an inch across, of a rosy-purple colour.

Echinocactus oxygonus. Sharp-angled. (Bot. Mag. 4162.) Cacteæ. Icosandria Monogynia. A native of South Brazil, and is in the Kew collection. It is a very free-flowering plant. The tube of the flower is trumpet-shaped, greenish, with red-brown scales, eight inches long. The petals, outside, are of deep red-rose; inside, of a pale rose. Stamens and anthers yellow. Each flower is about six inches across the front, when expanded. The plant is an abundant bloomer, and, being of the sub-globose form, with numerous deep furrows, is a very interesting object.

Masdevallia fenestrata. Windowed Masdevallia. (Bot. Mag. 4164.) Orchidaceæ. Gynandria Monandria. Sent from Jamaica to the Kew collection. It is a dwarf plant. The flower-stem rising about four inches high, of a rich brown blood colour. Each blossom about an inch long. It blooms throughout winter.

Pronaya elegans. The elegant. (Pax. Mag. Bot.) Pittosporaceæ. Pentandria Monogynia. It is a native of New Holland; a twining smooth greenhouse plant. It is an evergreen shrub, having the aspect of Marianthus cærulea-punctata, and bears a close affinity to Sollya and Billardiera. The flowers are produced in cymose heads; each blossom being about an inch and a half across, of a pretty blue-purple, with a rosy tinged centre. It is a very neat and beautiful flowering plant, well deserving a place in every greenhouse.

SCHOMBURGKIA TIBICINUS-GRANDIFLORA. LARGE-FLOWERED. (Bot. Reg. 30.) This is a noble variety of a lovely Orchideous genus. It has bloomed in the collection of Robert Hanbury, Esq. The pseudo bulbs being fifteen inches long, and the flower-stem five feet high. Each blossom is near three inches high. Sepals and petals brown, with lilac-pink towards their origin. The lip is yellow, with a few streaks of red. It deserves to be in every collection.

SPIREA LINDLEYANA. DR. LINDLEY'S SPIREA. (Bot. Reg. 33.) Roseaceæ. Icosandria Pentagynia. It is a native of the Himalayas; a fine tall shrub, flowering abundantly from June to September. During three winters it stood in the open ground uninjured; but it was killed down as far as the ground; it is again shooting up. The flowers are numerously produced, in large terminal branching panicled heads; white. The shrub has bloomed in the garden of the London Horticultural Society, and well deserves to have a place in every shrub border.

# PART III.

# MISCELLANEOUS INTELLIGENCE.

## QUERIES.

ON THE TREE CARNATION.—An old subscriber to the FLORICULTURAL CABINET will be obliged for some information on the culture and habits of the Tree Carnation, and if it will live in a cool greenhouse? Will the Mandevillea suaveolens bloom in the same situation? It has lived through the winter, and made some shoots this spring, but is always covered with the green fly.

[A strong infusion of chamomile or tobacco water, sprinkled liberally over and under-side the foliage, or suffocate by smoke, will readily kill the insects, and the plant may easily be kept free in future. Stop them at first appearance. The Mandevillea will bloom freely in a warm greenhouse. The Tree Carnation will do in any good greenhouse, and requires no more than the common attention of a rich loamy soil, and to have a liberal drainage. It is easily increased by layers.
CONDUCTOR.]

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GERANIUMS.—Having a few good ones in my greenhouse, I am anxious to increase my collection. Will any correspondent furnish me with a list of the newest and best? likewise the best method of propagating by seed?

Evesham, June 20, 1845. M. A.

An answer in your next will oblige.

## REMARKS.

## OBSERVATIONS ON THE GARDENS AND COLLECTIONS OF PLANTS AT EALING PARK, NEAR LONDON.

[*Continued from* p. 144.]

THE following are a few, and a few only, of the plants which compose this part of the collection:—Phœnocoma prolifera, 3 feet high, and 3 feet across; there are two of these dense bushes, one of them is 4 feet through, and coming into bloom; Dillwynia subumbellata, 2 feet 6 inches high, and the same in diameter—a fine plant; Chorozema cordatum, 7 feet high, and 5 feet through—a monstrous plant, loaded with flowers; also Chorozema ericoides, fine; Anthocercis littorea, in flower, well grown, and 3 feet high; the old Coral-tree, 6 feet high, and 5 feet across, with 15 spikes of flower coming up, will shortly be a magnificent object; Chironia frutescens, very fine; and Stylidium fasciculare, like a huge bush; Babingtonia camphorosmæ, in good health; likewise three enormous plants of Chorozema varium; Hardenbergia Comptoniana, on a trellis, 8 feet high, covered with flowers; the scarce Enkianthus reticulatus, 4 feet high, and in fine health, so also is Illicium religiosum; Loddigesia oxalidifolia, is 2 feet high, and 3 feet through—a beautiful and perfect specimen; two fine Gompholobium polymorphums, on shield trellises, very good, and coming into bloom; on similar trellises are good plants of Tropæolum edule and tricolorum; Eleocarpus dentatus, and Podolobium trilobatum are in fine health; so is Scottia dentata; Zichya villosa, on a shield trellis, 5 feet by 4, is really grand; Gastrolobium spinosum, a rather scarce plant, proves to be a most valuable acquisition to our greenhouse plants, and is here coming beautifully into bloom; Oxylobium Pultenæa is also finely in flower, and, by its side, forming a beautiful contrast with its violet-purple flowers, is Prostanthera violacea, 4 feet high by 3 feet across; close by these stand splendid plants of Daviesia latifolia, Acacia pulchella, and Indigofera australis, all in perfect beauty; Dillwynia speciosa, 3 feet by 3, in flower, contrasting with Pimelea spectabilis, 4 feet high, and 4 feet through—a perfect specimen of superb cultivation: Boronia Fraseri, 4 feet by 3, a good bushy plant, in rude health; the scarce and sniffy Merbelia grandiflora promises to make a good specimen; Chorozema Henchmanni betrays skilful treatment, and will shortly be in bloom; so likewise does a plant of a new Daviesia, with showy flowers; the scarce Dracophyllum gracile deserves our especial commendation; for, although scarce in collections, no garden should be without it. The elegant Indigofera incana is also another subject of much interest, and will shortly be a picture of great beauty. There is a new Gastrolobium, which promises well, and is growing away vigorously. There are also the following very remarkable plants:—Acacia cultriformis, Coleonema pulchrum, 3 by 5 feet; Gnidia pinifolia, 2½ by 3 feet, a lovely plant; Epacris ceræflora, with elegant white flowers, and in profuse bloom; Diplolæna Dampieri; Platylobium formosum; and Adenandra speciosa, all large and healthy specimens; Veronica speciosa, an immense plant, 4 by 4 feet; Pimelea decussata, 4 by 3 feet, a superb bush; Xanthosia rotundifolia, large, and in good condition. We observed, among numerous other climbers, a superb plant of Zichya coccinea, trained to stakes. Indeed, the principal of the climbers are trained in this way; Mr. Robertson preferring these, both for convenience and appearance; certainly nothing could well exceed the effect produced by this plant. Polygala bracteolata, trained also to stakes, 4 feet high, with a corresponding diameter. Here also was the graceful Acrophyllum venosum, a plant of sterling interest, just throwing up numerous spikes of its feathery white flowers, 2 feet high, and 2 feet 6 inches across. Pultenæa stricta, Selago Gilliesii, and Oxylobium retusum, were all equally deserving of notice. The graceful and sweet-scented Cytisus filipes, 10 feet high, with abundance of pendant branches, covered with small white Pea blossoms, is an object of no mean beauty. In immediate connection with this stood an enormous plant of Acacia alata, 10 feet high, in profuse blossom. A. platyptera, 5 feet high; A. pulchella, 6 feet high, and 5 feet in diameter; and A. verticillata, 9 feet high. These are trees under glass far surpassing the usual inhabitants of greenhouses. Leschenaultia biloba, 4 by 4 feet; L. formosa, 2 by 4 feet through, very fine. Eriostemon buxifolium, of which there are two remarkable specimens, were coming into blossom freely. *Cactus House.*—The kinds usually cultivated in this house have little interest in the eye of the scientific botanist, being chiefly those profuse blooming sorts remarkable for the gorgeousness of the blossoms. We noticed numerous large specimens of the following kinds:—speciosus, speciosissimus, Ackermanii, A. major, Jenkinsonii, Lawrenceanus (seedling), Malleson, splendens, &c. *Heath House.*—This is a lean-to building, 40 feet by 16, containing all the rare kinds of this favourite genus; several pits are also stored full of them, as the house cannot contain above one-half of the collection. The following are superbly in bloom:—Humeana, Beaumontiana, Templeana, and the valuable pinea, scarcely ever seen in collections; three grand depressas, and a matchless Cavendishii, loaded with bloom; Banksiana, splendens, two tricolor elegans, two gemmifera, infundibuliformis, ampullacea vittata, Pattersonii, and a monstrous plant of ventricosa globosa; a large intermedia, ampullacea, vittata, superb, grandiflora, cerinthoides, elata, the charming Blandfordiana, and a huge inflata, 4 feet high, and 5 feet in diameter; radiata, 4 by

4 feet, trossula, 3 by 3 feet, and the pretty andromedæflora; two persoluta albas, 5 feet high, and 3 feet through; Irbyana, in capital condition; tricolor, Archeriana, grandinosa, vestita coccinea; the useful and lovely ovata, together with Thunbergiana, ventricosa, coccinea minor, v. carnea, Aitoniana, Solandri, daphnoides, Bonplandiana, the beautiful Parmenteriana rosea, and an excellent plant of tortulæflora, in first-rate health; Macnabiana in equally fine order; so was elegans.

We now come to the large stove, a house 55 feet wide, with three spans to the roof, and 65 feet long; the height is nearly 20 feet. Numerous rare birds, of rich and vivid plumage are placed near the Orchidaceæ. Gold fish swarm in a basin of water below, overhung with Ferns and huge masses of gorgeous Orchidaceous flowers, constituting a rich and dazzling combination of tropical vegetation, in high keeping, surrounded with luxuriant foliage; a glass screen separates the general collection of plants from the Orchidaceæ. There was a grand plant of Cuphea Melvilla; a cutting struck from the plant exhibited by Mr. Robertson last season, 4 feet through; this forms a useful plant for the greenhouse in autumn. Gloxinia tubiflora coming into bloom. Tabernæmontana coronaria, and coronaria flore pleno, beautifully in flower. Clitoria fulgens, a new climber; and some large plants of Manettia cordifolia, M. splendens, Begonia sanguinea, and Pleroma petiolatum, were also fine. Thunbergia chrysops, trained to stakes, is rioting away most gloriously; Sauranja spectabilis, a plant with fine foliage, is coming into flower; Calliandra Houstoni, Æschynanthus Roxburghii, and Inga pulcherrima are doing well; Pavetta caffra, 12 feet high, and well furnished, is in admirable health; so is Allamanda cathartica, 8 feet in height. There is a well-grown specimen of Hindsia longiflora, and another on stakes of Dipladenia crassinoda, 4 feet high, which will shortly be a magnificent object. Begonia parvifolia is finely in flower, so is a wonderful specimen of Euphorbia splendens. Poweria coccinea is very large on stakes, so are two plants of Stephanotus floribundus, one, the original plant introduced—certainly the parent of a valuable progeny; these are really grand objects scarcely to be described by so feeble a pen. There are also the following remarkable specimens:—Franciscea latifolia, F. Pohliana, Centradenia rosea, Petrea volubilis, Burchellia capensis, Ardisia crenulata, loaded with crimson berries; Osbeckia sinensis, Clitoria Ternatea, with blue pea flowers; Turner's ulmifolia, T. elegans, several large Clerodendrons, C. hastatum, C. Hugelii, and C. splendens; Aphelandra cristata, Gesnera reflexa, a magnificent Lemonia spectabilis, 3 feet high, and 4 feet through. Two very good Rondeletia speciosa, the rare Aphelandra aurantiaca, Melhania Erythroxylon, Laplacea semiserratifolia, Ardisia mexicana, and several large Ixora coccineas; Echites splendens is rambling away most luxuriantly; and Barringtonia speciosa is putting forth his broad Magnolia-looking foliage in great luxuriance. Among the Orchidaceæ were some Sobralias just imported; Odontoglossum hastatum was sending out two fine spikes; Oncidium divaricatum was in capital health and finely in bloom; so were O. luridum var. and O. ampliatum, Saccolabium guttatum, S. præmorsum, Aerides affine, A. affine rubrum, Barkeria spectabilis, Cattleya Mossiæ, C. crispa, and Oncidium pulchellum were thrusting out their roots and spikes of flowers most vigorously. The following Dendrobia were very remarkable:—D. nobile, D. moschatum, D. crispum, D. cupreum, D. cærulescens, D. calceolaria, D. densiflorum, superlatively fine; D. aggregatum, D. taurinum, D. sanguinolentum, D. Gibsonii, D. Dalhousiana, D. fimbriatum, D. chrysanthemum, D. Cambridgeanum, and the curious D. comminatum. Many of these are immense plants; so are Oncidium altissimum, and two O. Lanceanums, O. flexuosum, and O. Baueri, Vanda teres, V. violacea, and Saccolabium Blumei, were in excellent health. There is a wonderful mass of Aerides odoratum, and large plants of Camarotis purpurea, Phaius Wallichii, Schomburgkia violacea, S. marginata, Peristeria elata, Cymbidium giganteum, Vanda unicolor, V. Roxburghii, V. cærulea, and V. cristata. The beautiful Phalænopsis amabilis is doing well; so is Aerides virens, Epidendrum rhizophorum, and a host of others equally grand. The curious Cephalotus follicularis, with its little pitchers, is thriving finely.

There is a range of five other houses, principally filled with choice plants;

two of them chiefly with Azaleas. The principal Azalea house is 40 ft. long, and contains some grand specimens; several large phœniceas, from 4 ft. to 6 ft. high, clothed to the ground with foliage and flowers; several whites of similar dimensions and growth; sinensis, 5 ft. high and 5 ft. through, is bursting literally into a mass of bloom; speciosissima 5 by 3 ft., fine; Danielsiana, several trained like standard Apples. Fine bushes of Smithii, Rawsonii, mirabilis, leucomegista, splendens, 5 ft. by 5 ft., a grand plant, double red: pulchra, 6 by 5 ft., and purpurea macrantha, and various other splendid specimens. The next house contains all the finer kinds known about London, new and old kinds; amongst them we noticed exquisita, a noble lateritia, densely covered with bloom, just expanding; a magnificent tree of Danielsiana, tricolor, triumphans, coronata, rosea superba, phœnicea alba, Prince Albert, Hibbertii, grandiflora rosea, Apollo, Minerva, Decora, sinensis tricolor, leucomegista, and Prima Donna. It is scarcely possible to imagine plants in more luxuriant growth than these; many of them in this house, although only one year out of the hands of the nurseryman, are already great rude bushes in rampant growth. The succeeding house is what is termed the intermediate house, and contains some fine things. Gompholobium polymorphum luteum is progressing rapidly, so also is a healthy bush of Pimelea Hendersoni. Roella ciliata is 2 by 2 ft., and in superb order. Chorozema angustifolia, C. ovata, and a new species of a fine genus, are all admirable; in a similar state of health is Lalage ornata and Cosmelia rubra. Leschenaultia Baxteri is making a fine plant, so is Chorozema Dicksoni. There is a fine plant of Chorilæna myoporoides, 3 ft. across and 3 ft. high, growing very rapidly. The scarce and beautiful Daviesia cordata is just coming into bloom. There are very large specimens of Statice macrophylla and S. arborea, Siphocampylus Betulæfolius and lantanifolius. Solanum amazon cum and Canavalia bonariensis are just expanding their blossoms. There is a fine plant of Styphelia tubiflora, and an immense one of Æschynanthus formo sissimus. Zichya rotundifolia is shooting out vigorously, so also is a curious climber from New Zealand allied to Echites, named Parsonsia heterophylla.

The next and last house comprises a collection of Pelargoniums which are cultivated principally for exterior decoration, as a vast number of showy plants are required during summer for vases, beds, and other situations. Finally, Mr. Robertson conducted us to what is termed the North House, a desirable and most useful building in all large establishments where plants are required to be kept in bloom for any particular purpose, as is often the case at Ealing Park, not only for the great exhibitions of the Horticultural Society, where the collections of Mrs. Lawrence form objects of prominent interest, but also for the purpose of decoration during the gay parties which are so often given here during the summer. In this house we found noble plants of Cytisus filipes and C. racemosus, the latter 10 feet high and 7 feet through—a perfect mass of bloom; Eriostemon myoporoides, 7 by 4 feet, just in perfection, so likewise was E. cuspidatus, 6 feet high, and beautifully formed; Acacia alata, 10 feet high and 9 feet across, a most wonderful plant to be in a pot; Kennedya monophylla, trained to stakes 6 feet high, and clothed thickly to the pot, is a sheet of purple. But our space is exhausted sooner than our subject, which, to be treated properly, would require a volume.

GUANO; ITS ACTION UPON THE GROWTH OF VARIOUS PLANTS, FRUITS, &c. By J. E. TESCHEMACHER.—The ultimate object of vegetable life appears to me to be the production of seed; to this purpose, and to accumulate the properties

is attained; exterior vegetable action then declines until another season. Experiment has shown that plants grown on mere sand, with the assistance of water, will throw out stem, leaf, and flower, nay, even the forms of seed, but these will be mere integuments, empty vesicles, or little bladders; also that by constantly stimulating with peculiar manure, we can throw plants into such uninterrupted luxuriance of shoots and foliage, that often the flowers, and more often the seeds, do not appear within the limits of the season. Combining these views with others on the production of double flowers, and with some suggested by various experiments on guano, it seems to me highly probable that certain manures are particularly conducive to a luxuriant growth of stem and foliage, while others are peculiarly so to the production of numerous and well-filled seeds. Suppose the nitrogenous (ammoniacal) and alkaline (potash and soda) manures to be those chiefly instrumental in producing stem and foliage, then nitrate of soda will be valuable for this purpose, and if the soil itself contain the ingredients of the seed in a fit state for absorption, the plant thus thrown into a state of luxuriance will be enabled to draw from it sufficient to make plenty of good seed. But if the soil in itself contains them very sparingly, then this excess of stem and foliage, although containing a quantity of nitrogenous and palatable food for cattle, will be deficient in rich seed. Now we know that phosphate of lime and of magnesia, with sulphurous compounds exist in all seeds useful to man and animals: these, however, do not form part of nitrate of soda and potash, hence the latter can only assist the plant in extracting them from the soil. Suppose, secondly, we use a manure combining the nitrogenous principles in the shape of urates, &c., with the alkaline phosphates, sulphates, muriates, &c., then even on the poorest soil, while the ammoniacal portion in performing its office of causing luxuriance in foliage and stem, the ingredients of the seed are offered in abundance to the root. This is exactly the predicament of guano—most of the salts in which are soluble in water—and those which are not, such as the phosphate and oxalate of lime, become so when combined near the roots with the carbonic acid furnished by the humus as well as by other portions of the manure. The use of a solution of guano in water is therefore good, when the seed is not required; but where it is, the deprivation of the insoluble phosphate of lime is very injurious. Hence, from the proper use of guano, a luxuriant vegetation is followed by the production of a large crop of fine seed. As a further elucidation of my views, I will state that the manure made use of for the purpose of producing double flowers, is the highly nitrogenous stable manure, which is used in such quantity as to prevent the roots from coming into contact with that part of the soil containing the ingredients of the seed—this manure being then chiefly favourable to the production of foliage alone, if continued through many generations will by degrees convert the stamens, pistils, and the parts destined by nature to prepare the seed, into leaves or petals, and finally obliterate the seed. These flowers, if grown in a poor soil, scarce in nitrogenous substances, will again, as is well known, revert to their normal single seed-bearing state. Several of my experiments with guano proved to me that it shortened the internodes, or portions of the stem between each leaf; this was particularly evident in seedling Orange and Lemon trees, and is a sure indication of fruit or seed-bearing; indeed the spurs, which are well known as the fruit-producing parts of many trees, are but shortened branches where the internodes are reduced to a mere nothing, and where, consequently, the axillary action is concentrated into a small space. I have, therefore, no doubt of the beneficial action of guano on fruit trees. Many experiments are, however, yet desirable; such as whether guano acts beneficially on the receptacle of the seed, which is the fruit of the Strawberry and Raspberry; whether on the exterior covering of the seed, which is the Apple, Peach, Plum, &c., or on the kernel or nut, or on the pulpy envelope of the seed, as the Gooseberry, Grape, Melon, Gourd, &c. I hope that these ideas will give rise to numerous experiments this year, and that those who make them will not hesitate freely to communicate them for the general benefit. I will merely add further, that I should consider it advisable, in all experiments on fruits, to try both the guano itself, as well as a weak solution of it in water; it is highly probable that the solution will be efficacious where the receptacle or the exterior of the seed is most valuable; whereas in Corn, Peas, Beans, &c., those phosphates which are insoluble in water, and are very necessary, would be thus lost to the plant.—*Hovey's Magazine of Horticulture.*

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On drying Flower Specimens.—For several years I have paid attention to the delightful pursuit of obtaining specimens of flowers, drying them, and preparing a herbarium. A few months back I obtained some prepared paper from Messrs. Bentall and Co., of Halstead, and have tried it during the above period with a vast number of flowers, and I can very strongly recommend it. It is very superior to blotting-paper, the specimens drying much readier, the paper seldom requiring to be changed, and the colour of the flowers, &c., much better preserved.

The plan I pursue is to have some sheets of millboard, and having laid one or two old newspapers quite smooth upon a sheet of millboard, I put a sheet of the drying paper, and lay the plant to be dried, carefully spreading the leaves and petals. I then place another sheet of the drying paper over the specimen, and a few more newspapers to absorb the moisture, and over the whole I then place a sheet of millboard; and thus proceed until I have laid out my specimens, taking care to have a sheet of the millboard between each layer of specimens.

I put a heavy weight upon the top of all, or, which is far better, put the whole in a screw press, and continue to shift the papers and increase the pressure daily. Should the plants be very succulent, the paper will require the oftener shifting and fresh paper. The plants should not be taken out until perfectly day. The paper, when dried, will be ready for use at any future time. The size I recommend is 16 inches by 10 or 11. The drying paper is as cheap as common blotting paper, and far more useful in drying botanical specimens.

F. N. B.

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On Glass Labels.—" In a recent number it was suggested that hermetically-sealed glass tubes, with the names or numbers of the plants inclosed in them, might be employed as labels, the originator of the plan observing that it would be necessary to send the names or numbers to the glass-blower, which would be attended with inconvenience and expense. I also fear that when completed, the insertion of one end of the tube in the ground, while the other was exposed to the great heat of the sun in summer, would injure, if not destroy, the written or printed labels. Having made several experiments in joining glass with Jeffery's marine glue, it has occurred to me that very neat, simple, and most endurable labels might be formed by any gardener during his leisure hours, at a comparatively nominal expense, the marine glue being only 8*d.* per lb., and the glass the fragments or waste of the kind used for common windows. I send you three specimens, one written, one partly written and partly printed, and one wholly printed, attached to the fragments of glass in the manner I have alluded to; and I am convinced they would prove imperishable for the purpose for which they are intended. The marine glue at that part of the glass which is inserted in the earth would contract; while the part exposed to the sun would expand, and each end would suit itself to the circumstances under which it might be placed without the least injury to the labels; for moisture has no effect whatever upon the composition invented by Mr. Jeffery."

The manner of preparing them seems to be by pasting a paper label to the face of a piece of glass, then smearing another piece of the same form and size with Jeffery's marine glue, and immediately afterwards pressing the two pieces together.—*Gardener's Chronicle.*

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Cultivation and Planting of the Ranunculus.—" The soil should be trenched eighteen or twenty inches, and composd of good rich loam, to which I add one-sixth part of very old, well-rotted cow manure, and the same quantity of clay broken into small pieces; add to this a little sand, and thoroughly mix the whole; if the soil binds, add some sandy peat; make the bed on a level with the path or walks; the plants would do better if the bed was below rather than above the level. Having prepared the soil, as above, sometime during the summer or autumn, take the earliest opportunity in the succeeding spring to stir up the bed one spit deep, and take off one inch and a half of the soil; then place the plants in an upright position on the surface, six inches apart each way, and replace the soil carefully, which will cover the crown of the Ranunculus about one inch and a half; deeper planting would be injurious. After the plants appear, keep them free from weeds, and press the soil firmly around the plants after they get two inches high. If the weather prove dry, water them freely early in the morning, and shade them from the sun from 9 o'clock, A.M. to

3 o'clock, P.M. As soon as the foliage becomes yellow, take the roots up and dry them thoroughly in the shade, and keep them in a dry place. The Ranunculus loves a cool and moist situation, but no stagnant water should be permitted, nor should they be placed under the shade or dripping of trees. The morning sun, free circulation of air, and shade as directed, will ensure success."
—*Hovey's Magazine.*

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**To prevent newly-planted Shrubs being loosened by the Wind.**—Let a few of the low branches be pegged down close to the ground, say one in each quarter. This secures the plants steady, far preferable to any other method I have seen adopted.

FRUTEX.

## ANSWERS.

**On Belladonna Lily.**—Observing in a recent number of the FLORICULTURAL CABINET an inquiry made relative to the treatment required to have the beautiful Belladonna Lily bloom freely in the open border, I beg to state that I have had it bloom vigorously for many successive years, growing in the border of a south-aspected wall, planted within a few inches of the wall, in a deep rich sandy loam, on a dry subsoil. The bulbs are about six inches deep. I planted them (one dozen) in a row, at six inches apart, in the year 1830, and they have remained undisturbed ever since, and each year, from 1832, have bloomed vigorously. They do not do well when disturbed by dividing, replanting, &c., but planted in a situation like mine, and there allowed to remain, will realize every expectation.

Herts.

CLERICUS.

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Several gentlemen having written to us to give the names of fifty Double Anemones which we consider the best, we send them, as below, for insertion in your next next number, if you think proper to insert them.

London.

T. & C. LOCKHART.

*List of Fifty best Sorts of Double Anemones.*

Azure Incomparable, very deep blue
—— Superbe
Arrian, white and pink
— Merveille
nceau, very deep
nth, fine bl
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hite
e, variegated
scarlet and white
variegated
Manteau Bleu
Miss Wright, red and rose
Madame Schroeder, red
Navarino, blue-lilac
Purpurea elata, red and violet
Perle d'Amour, white, red heart
—— l'Orient, white and red
Pallas, red
Prince Albert, scarlet
Rubis Brillant, ruby
Ruma'dus, scarlet
Rare Partout, white and rose
Rose de Haarlem
—— Eclatante
Rosalie, rose and scarlet
Reine des Français, crimson and carmine
—— Vasthy, red
Scarlet Soldier
Sallust, rose, variegated
Sylvia, scarlet
Terpsichore, rose, variegated
Tricolour, red, white, and gr
William the First, pink and red striped.

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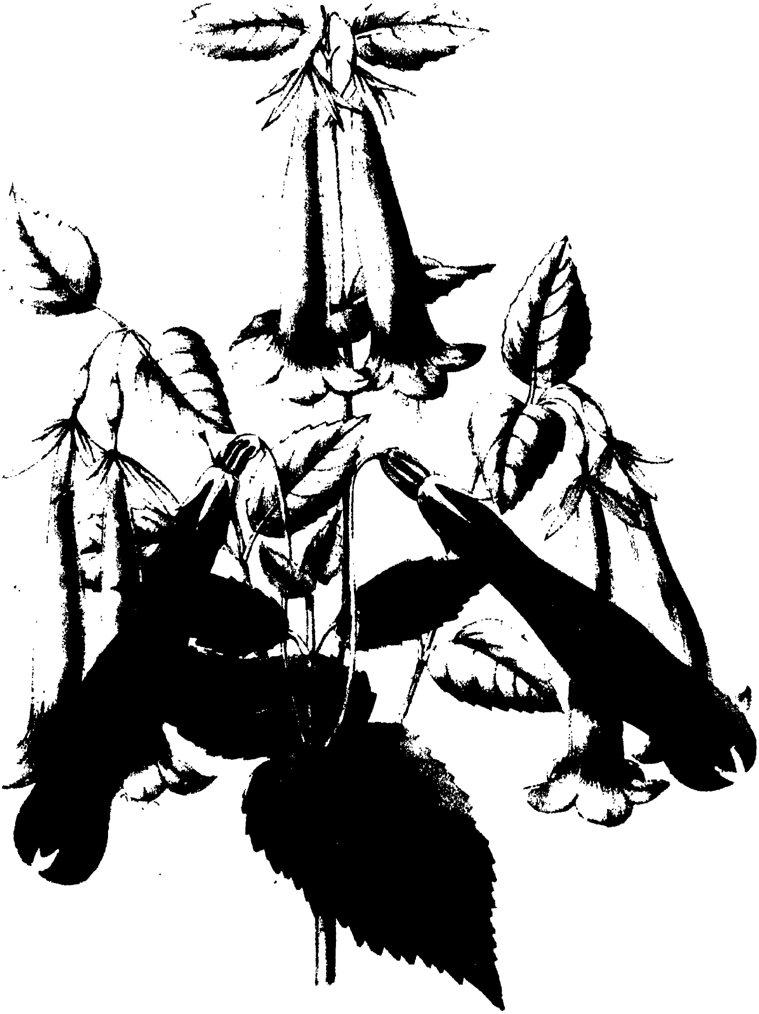

1. SIPHOCAMPYLUS NOVA SPEC: 2. VASALLIA FLORIBUNDA.

THE

# FLORICULTURAL CABINET,

AUGUST 1st, 1845.

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## PART I.

## EMBELLISHMENTS.

## ARTICLE I.

### FUCHSIA SERRATIFOLIA.

Scarcely any tribe of plants with which we are acquainted has in so few years received such beautiful additions as have Fuchsias. Whilst the cultivator at home has perseveringly engaged in raising seedlings, almost each successive year introduces some fine species from abroad. The Fuchsia has, therefore, unquestionably now become one of the greatest ornaments with which our greenhouses and flower gardens are embellished throughout the summer and autumn.

The number of species growing in Peru alone, yet remaining to be introduced, of which we have received information, holds out the pleasing hope of still greater improvement; especially as some of the kinds are described to be very magnificent, and of the most novel and beautiful colours. Messrs. James Veitch and Son, of the Killerton Nurseries, Exeter, received the present splendid species from Peru, and bloomed the plant, from which our figure was derived, during the past summer. It is remarkably strong and vigorous in growth, and blooms freely; the flowers and leaves being produced in threes, and proceed triangularly from the stem.

The plant succeeds well with the ordinary treatment applicable to other kinds.

# ARTICLE II.

## ON GROWING PLANTS IN ROOMS.

BY A LONDON AMATEUR GROWER.

Being an admirer of the prevailing practice of cultivating plants in rooms, and having had numerous solicitations for advice as to their management, I am induced to draw up the accompanying remarks, judging that they may be in some degree useful to a portion at least of the readers of the Floricultural Cabinet. I do not wish it to be understood that I think plants can be grown as vigorous, or blossom as freely, in rooms as those cultivated in well-constructed greenhouses; but I do not hesitate to assert that those persons who may think proper to adopt the rules hereafter laid down will find the result to answer every expectation.

*Pots.*—The necessity of having pots of various sizes is very obvious; the shape, however, should be uniform, in proportion as follows, viz.: five inches deep (inside measure), five inches diameter at the top, and three and a-half inches diameter at the bottom. Pans should be provided to correspond.

*Draining.*—Good draining is essentially requisite. Each pot, according to their different sizes, should have from two to four inches deep of coal cinders, broken to the size of a child's common play marble, laid at the bottom, first placing a piece of pot over the hole at the bottom, taking care the piece is not flat, but of that form that it will freely allow superabundant water to pass off.

*Soil.*—Take the top spit with the turf upon it from a common or old pasture field, not digging deeper than six inches; the soil should be entirely free from clay and if the loam be sandy it is preferable. To this soil add one-fourth of rotten horse-dung. The longer this compost is laid together the better. Before using it for planting in, it must be well chopped and broken, but not sifted at all through a riddle, as plants flourish far more freely in the soil when left open, there being a freer passage for water, heat, air, &c., to the roots. There are but five families of greenhouse plants that refuse to flourish in such a compost as the above. I do not include Camellias and Ericas (Heaths), though I have no doubt but they may be cultivated in rooms with success; the latter tribe will be found the most tenacious of injury in such an habitation.

*Potting.*—I consider it but superfluous saying anything about propagating plants, when the cost of a small plant is so trifling, and may be obtained at most nurseries.

To begin with a plant procured from the nursery. In the first place, examine if the roots are coming through the hole at the bottom of the pot; if so, this points out the necessity of repotting, which must be repeated until the plant has attained the size required for blooming. The size of the pot for repotting in should be about two inches more in diameter than the one the plant is taken out of.

*Watering.*—River or rain water is the best, and should always be of the same temperature as the room in which the plant is placed. The pot should always stand in a pan or feeder; but water should not be allowed to stand in it, excepting when a plant is pushing forth flower-shoots or stems; at which period many plants, particularly strong growing kinds, are much assisted by having a constant supply of it, not to glut them, but to allow that given to be dried up before a fresh quantity is given. Particular attention should always be paid that no plant be allowed to flag its leaves. In some stages of growth and situation there will be found plants that will require water to be given them twice in one day, and at other times not oftener than once a week. The best criterion to know when a plant requires water to be given is when the soil on the top of the pot appears dry; then a flooding over is sufficient.

*Filth.*—With some kinds of plants the green fly is often found very troublesome. Sprinkle them over with diluted tobacco-water, or the plants infested may be put into a packing-case, and fumigated with tobacco-paper; by either application the insects will be effectually destroyed. The tobacco-water or tobacco-paper may be procured of the tobacconists at a very trifling cost; 1*s.* expended in either would serve for twelve months, with a number of plants. It is necessary to keep the plants free from dust, and to pick off decayed leaves; also frequently stirring the mould on the surface with a blunted stick. They will require washing over their tops once a-week, either by means of a syringe or watering-pot. In frosty weather, watering over their tops should be performed in-doors.

*Air and Light.*—When the air is not frosty, a free circulation is at all times beneficial. In order to have healthful-looking plants, the branches should not be allowed to touch each other, and should always be kept as near the light as possible, frequently turning the plants to prevent the heads being deformed, as the natural inclination is to lean towards the light.

*Pruning.*—Taking off the point of the main shoot of a woody plant when young causes it to grow bushy, and to be formed of a handsome shape. Also, when a plant is making shoots for flowering, taking off the points of the most luxuriant shoots tends to increase the quantity and size of the blossoms.

*Ripening the Buds.*—The singularly formed foliage or shape of some plants may obtain for them a place in collections; but in general most plants are admired for their blossoms. In order to have them in perfection as well as profusion, it is highly essential that the embryo, or bud, be in a mature state. Bulbous plants, as Amaryllises, Hyacinths, &c., when the flower is decayed, the foliage must be encouraged for a few weeks; after which, it may be allowed to die away and remain at rest. The pots retaining the bulbs may be placed on a shelf, where they will be dry, until the time of re-potting, which in general will be in October. Those plants which produce their blossoms upon the wood of the same season, as Pelargoniums (Geraniums), Salvias, Roses, Chrysanthemums, &c., after flowering, require their shoots to be cut back to three or four buds, taking care to preserve the form of the plant, and giving but little water during the state of rest. When the plant begins to grow in the spring, having a larger pot given, and a regular supply of water afforded, and kept in moderate warmth, the blossoms will be produced. Herbaceous plants, as most species and varieties of Calceolarias, &c., after flowering, require their tops cutting off, and but little water during their rest; a large pot is given when the plants begin to grow. Deciduous plants, as Fuchsias, Hydrangeas, &c., when the leaves begin to fall, will require but little water, and rest until spring, when a larger pot will be necessary, and the shoots to be pruned back a little. Evergreens, as Azaleas, Myrtles, &c., when done flowering, require a larger pot, and their wood encouraging until it becomes ripe. Here I include the Cactus tribe, &c. At this potting, some of the species will require their old wood thinning out.

*Choice of Plants.*—The taste of persons being so dissimilar, no list of plants I could furnish would be able to give entire satisfaction; I therefore think it unnecessary to attempt it here, and must leave the amateur to suit himself, his experience and fancy being likely to afford the best directions on the choice of plants suitable for him to cultivate.

## ARTICLE III.

### REMARKS ON THE HEPATICA.

BY A COUNTRY CURATE.

To me the early flowers of spring possess more than ordinary interest; and one of the neatest is the humble Hepatica in its varieties; and every flower-bed or border within sight of the dwelling-house ought to be ornamented with these lovely harbingers of still more extensive displays of beauty and fertility.

I have not been possessed of a plot of ground for a garden more than three years; but since I have, I have used every means to obtain a stock of the early spring flowers. I now possess the following:—Single blue, double blue, single white, single red, single pink, and the double red. I have read of several other varieties, but cannot find them at any nursery establishment I have yet applied to. I am quite aware, if attention had been paid to the raising of seedlings, other beautiful distinct varieties might have been raised. I am now, for the first season, attempting it; and next spring I hope to have the pleasure of having raised some other good ones. I have been told there is a double white variety in existence in this country, as also a double yellow, and a single white with red anthers; but I have not yet been able to obtain them.

The following kinds I have read of, and give the descriptive list with a view to bring the lovely little flower more into notice, and to encourage the production of seedlings, as well as to get all the kinds I can additional to my present stock; and I shall be obliged if any reader of the CABINET who possesses others I have not would inform me, through the medium of the conductor of this magazine, and I shall be glad to treat for a plant of each:—

1. *The great single blue Hepatica.*—The leaves are somewhat brown, and hairy at their first coming, which after are broad; the flowers are of a fair blue colour, with many white chives or threads (stamens) in the middle.

2. *The small blue H.*—The leaves of this Hepatica are smaller by the half than the former, and grow more abundantly, or bushing thick

together; the flowers (when it showeth them, for I have had the plant half a score years, and yet never saw it bear flower above once or twice) are of a pale or bleak blue colour, not so large as the flowers of the former.

3. *The purple H.*—This Hepatica is in all things like unto the first, but only the flowers are of a deep purple, tending to a violet purple. Small and very double.

4. *The lesser white H.*—The flowers of this Hepatica are wholly white, of the bigness of the red or purple, and the leaves somewhat smaller, and of a little whiter or paler green colour; else in all other things agreeing with the former.

5. *The great white H.*—There is no other difference herein from the last, but that the flower, being as white, is much larger.

6. *The ash-coloured or Argentrive H.*—Both the leaves and the flowers of this Hepatica are larger than any of the former except the last; the flowers hereof at the first opening seem to be of a blush ash colour, which do so abide three or four days, decaying still until it turn almost white, having yet still a show of that blush ash colour in them till the very last.

7. *The white H. with red threads* (stamens).—There is no difference between this Hepatica and the first white one, saving that the threads in the middle of the flower being white, as in the former, are tipt at the ends with a pale reddish colour, which added a great beauty to the flowers.

8. *The red H.*—The leaves of this Hepatica are of a little browner red colour, both at their first coming up and afterwards, especially in the middle of the leaf, more than any of the former; the flowers are in form like unto the rest, but of a bright blush or pale red colour, very pleasant to behold, with white threads or chives in the middle of them.

9. *The double purple H.*—The double Hepatica is in all things like unto the single purple kind, saving only that the leaves are larger, and stand upon longer foot-stalks, and that the flowers are small buttons, but very thick of leaves (petals), and as double as a flower can be, of a deep blue or purple colour, without any threads or bead in the middle, which fall away without giving any seed.

10. *The double blue H.*—In the colour of this flower consisteth the chief difference from the last, except one may say it is a little

less in the bigness of the flower, but not in doubleness of leaves (petals).

11. *The double white H.*—Hath smaller and fresher green leaves than any other; flowers snow white, very compact double.

12. *The single yellow H.*—The flowers are of a sulphur white.

13. *The peach colour H.*—Very neat and pretty.

14. *The single pink H.*—A very abundant bloomer.

All these plants with single flowers grow naturally in the woods and shadowy places of Germany, in many places, and some of them in Italy also. The double kind hath been sent out of Italy, and was also found in the woods near the Castle of Starnbeg, in Austria.

I find them grow well in a sandy loam, the subsoil being sand. They are thus in a favourable soil for enduring the severities of winter. In order to provide for casualties, I grow two or three plants of a sort in pots, which are kept in a cool frame during winter. I have not, however, lost a single plant during the last three winters. I obtained ripe seed at the end of June, 1844, and sowed it on the 18th of July. I retained the plants in their seed-pots until the end of March this year, when I planted them out in a sheltered situation at six inches apart; they have now made pretty bushy plants, and I intend them to remain in the situation they now are till they bloom the next spring. I beg very respectfully to invite other persons to attempt to increase the varieties by raising seedlings, and with a special design to obtain double flowering ones.

## ARTICLE IV.

## THE GRAND FLORAL EXHIBITIONS OF THE METROPOLIS.

### Royal Botanic Society, *Regent's Park, June* 4.

With equal propriety may we apply to this exhibition of the Botanic Society the assertion made in our last Number relative to the Chiswick Show of May 24, being the best that the Horticultural Society ever had; for here, too, the numerous magnificent specimens displayed so high a state of cultivation, that it appeared impossible that many of them ever could be surpassed; and the increase upon last year of the number of competitors was also so great, that it was found indispensable to erect a new marquee to supply the requisite accommodation. We rejoice to have to record this most gratifying fact, because it so obviously affords us evidence that not alone is the knowledge of skilful treatment making rapid extension, but that the number of spirited cultivators are proportionately progressing. The visitors to the show numbered upwards of 8000.

Her Majesty the Queen, Prince Albert, the Prince of Leiningen, and other of the Royal Family, attended before the gates were opened to the public, and spent some time in inspecting the various collections. Her Majesty particularly noticed the most striking plants, as she passed through the tents. The fine specimen of Epiphyllum speciosum of Mr. Green especially elicited her admiration.

The early part of the day was fine, and promised fair weather; mid-day, however, brought with it a westerly wind, threatening clouds, and occasionally slight drizzling showers till about four o'clock, when a heavy shower, of some duration, fell; but from about half-past four to the close of the exhibition, the sun shone brightly, so that the walks and lawns soon became dry, and for two hours they were crowded by a numerous and highly fashionable attendance.

By the regulations of the Society, the exhibitions are open to all competitors, whether fellows or not. But in order that the specimens received for exhibition may be properly arranged, and displayed to advantage, the exhibitors are requested to communicate their intentions to the secretary previous to the day of exhibition, specifying the probable extent of table room, in square feet or otherwise, which their plants, flowers, &c., require. Unless previous notice has been given, the exhibitors, on entering the gardens, are requested to sign a book or deliver a statement in writing, specifying in what collections their articles are to be exhibited. They are also to apply to the clerk for labels to attach to their several exhibitions; and to see that when staged they are marked with the proper letters of division; and omissions or mistakes, arising from neglect or improper entries on their part, cannot be rectified after the awards have been made. At half-past eight o'clock in the morning the gates are closed, after which no subjects for competition are on any account whatever received; nor is any person allowed to open packages containing articles for competition. The judges proceed at ten o'clock to examine the merits of the subjects exhibited, by which hour the placing and arranging of all must be completed. Subjects of decidedly inferior quality cannot be received for competition, and such subjects the judges are empowered to reject; and in order to uphold the value and importance of the Society's awards, the judges are authorized either to withhold or to diminish the value of the awards; that is, to grant either first, second, or third prizes, at their discretion. The judges are also invited to recommend to the Council to increase the number or amount of the awards, and to give prizes for subjects of extraordinary merit which may be exhibited, although not specified in the schedule. It is particularly desired by the Society that all plants be distinctly labelled with their scientific names, and the places whence introduced, where practicable; and all cut-flowers are required to be distinctly named. Should any exhibition contain one or more plants which have not been in the possession of the exhibitor two months previous to the exhibition at which the plant or plants are shown, such circumstance will disqualify the exhibitor to compete for prizes, except in the case of plants newly imported by the exhibitor, and shown as new or rare. In the event of any dispute arising from this, the exhibitor is required to sign a written declaration, which is considered final. The judges are not appointed from among the fellows, members, or officers of the Society, which is a very good rule; nor is any person who shall accept the office of judge allowed to compete for prizes. Persons who supply subjects for competition for which prizes are offered, are granted pass-tickets, and are re-admitted to the show at two o'clock. At seven o'clock in the evening the exhibitions close, and all articles exhibited will then be delivered up to the exhibitors.

## CLASS I.

### MISCELLANEOUS GROUPS AND SPECIMENS.

In the collections of plants embraced in this class were numerous magnificent specimens, as will be found detailed below. In the small collections of tens and fifteens,—the former especially, in which there was nine competitors,—a decidedly inferior plant could not have been detected. No less than twenty-seven subjects were shown as specimens of superior cultivation and ornament; and in new or rare plants some very interesting ones appeared. Particularly captivating was the excellent plant, four feet high, of the beautiful Dipladenia crassinoda, shown by Messrs. Lucombe and Pince; it, indeed, fully realised our statement, that the plant well deserves to be grown in every stove collection. Very attractive, also, was a fine plant of Fuchsia serratifolia, (a good figure of which illustrates our present Number,) from Messrs. Veitch and Son. The Alpine plants proved to be not without interest, although they are wanting in that brilliancy which characterises most plants brought to floral exhibitions.

## STOVE AND GREENHOUSE PLANTS.

*In collections of* 30 *species or distinct varieties; not more than* 6 *species or varieties of any one genus to be admitted.*

*Nurserymen and Private Growers.*

1st Prize, 15*l.*, Mr. Barnes, gardener to G. W. Norman, Esq., Bromley.—This superb collection comprised, in Pimelias, Hendersonii, a dwarf specimen, 2 feet across, and full of its pretty pink flower heads; and decussata, a bush 4 feet high, and as much in diameter. In Dillwynias was ericifolia, clavata, and rudis, each a fine specimen, of 4 feet high, and full of bloom. In the genus Aphlexis was sesamoides, a cone-shaped plant, 4 feet high, studded over with its starry flowers; humilis, nearly as large, and equally well flowered; and purpurea grandiflora, a small specimen, with large deep crimson flowers; Azalea indica alba, a large spreading plant; and Gladstanesii, a small plant; Leschenaultia formosa, an immense mass of bloom, the plant being 2½ feet high; very healthy and fine plants of Clerodendron splendens and Kempferi; large bushes of Polygolia oppositifolia, P. cordifolio, and Phœnocoma prolifera, the latter 2 feet high and about 10 feet in circumference; a very beautiful bush of Boronia denticulata, 2½ feet high; Podolobium staurophyllum, a flat-trained plant, 4 feet by 3; Eutaxia pungens, Ixora coccinea, Gompholobium tenellum, Rondeletia speciosa, Epacris grandiflora, good plants of Erica odora, full of its pretty little white bells; fastigata lutescens, elegans, Thunbergii, grandinosa and intermedia, the two latter being immense specimens; and a large specimen of Stephanotus floribundus, but not well in bloom.

2nd Prize, 10*l.*, Mr. Hunt, gardener to Miss Trail, Hayes.—This collection contained an Ixora coccinea, 5 feet high, with forty-two flower-heads, most of which were expanded, and had a fine effect; Gompholobium polymorphum, an exceedingly good plant, on a curved shield trellis, 5 feet by 3, well filled with bloom; a magnificent plant of Pimelia spectabilis, 4 feet by 4, thick and well furnished, but not fully in bloom; a dense Leschenaultia formosa, Boronia serrulata, a nearly globular plant, covered with "pink stars;" Clerodendron squamatum, with two spikes; Phœnocoma prolifera, Pimelia decussata, Achimenes longiflora and grandiflora, good pots; Polygala oppositifolia, large; Kennedya villosa, Vinca rosea alba, Azalea Danielsiana, Polygala cordifolia, Oncidium flexuosum, O. luridum guttatum, and O. Devoniensis, a species with brown-mottled flowers from Honduras; Dillwynia splendens, and D. clavata; Chorozema varium, Epidendrum macrophyllum, Gardoquia Hookerii; and the following heaths,—E. perspicua nana, a beautifully-flowered bush, 2½ feet by 3 feet; E. vestita coccinea, large; E. translucens rosea, E. gemmifera, 3 feet across, but not quite out; E. ventricosa prægnans, good; and E. ventricosa superba.

No other competitor.

*In collections of* 15 *species or distinct varieties; not more than* 4 *species or varieties of any one genus to be admitted.*

*Nurserymen only.*

1st Prize, 7*l.*, Mr. Frazer, Lea-Bridge Road.—The whole of these were remarkably well grown; Epacris grandiflora was a fine bush, 5 feet high by 4 feet in diameter; Eutaxia myrtifolia was large, and a complete mass of bloom; an excellent Boronia pinnata, a depressed cone, 3 feet by 3; Coleonema pulchra, a great bush, 5 feet by 5 or 6 feet in diameter; a very large globular plant of Pimelia linifolia, Azalea sinensis, Chorozema Henchmanni, Azalea variegata, a splendid plant; Erica vestita coccinea, fine; Boronia serrulata, a round plant, 2 feet high; a variety of Daviesia latifolia, on trellis, and quite full of its pretty little blossoms; Erica Bergiana, 3 feet by 3, good; a finely-bloomed Chorozema varium var. nana, Polygala acuminata, and a very nice Pimelia spectabilis.

2nd Prize, 4*l.*, Mr. Pawley, Bromley, for an immense Gompholobium polymorphum, nicely flowered; Chorozema varium, a large bush, 3 feet high, and full of bloom; a very large Hardenbergia monophylla; a cone-shaped Erica Cavendishii, 2 feet by 1½; Pimelia decussata, a 3 feet bush; Ixora coccinea, 2 feet high, with twenty heads of flowers; Euphorbia splendens, Calanthe veratriflora, Azalea lateritia, thin; Erica perspicua nana, a fine plant, 1½ foot each way; Sinningia Sellerii, Clerodendron splendens coccinea, Erica ventricosa stellata, and Aphelexis humilis, 2 feet high.

No other competitor.

### *In collections of* 10 *species or distinct varieties; not more than* 2 *species or varieties of any one genus to be admitted.*

### *Private Growers only.*

1st Prize, 5*l.*, Mr. Green, gardener to Sir E. Antrobus, Bart., Cheam, for ten superb plants, consisting of Hovea Celsii, trained cylindrically, 3 feet, finely bloomed; a dwarf Pimelia decussata, loaded with blossoms; Calanthe veratriflora, with ten spikes; Coleonema pulchra, a very handsome bush, 4 feet each way; a large Genista bracteolata; Gompholobium polymorphum, on a curved trellis; Azalea Gledstanesii, 5 feet by 3, very well in flower; a fine Brachysema latifolia, on a cylinder trellis; Pimelia rosea, a neat dwarf plant; and Erica propendens, 3 feet.

2nd Prize, 3*l.*, Mr. May, gardener to E. Goodhart, Esq., Beckenham, for a collection so nearly equal to the last, that the judges had great difficulty in deciding between them: these were Ixora coccinea, a splendid object, 4 feet high, with thirty-two flower-heads, nearly all of which were expanded; Hovea Celsii, an exceedingly good plant, 3 feet by 2, loaded with flowers; a small but very good Pimelia spectabilis; Erica splendens, 2½ feet, hardly out, but otherwise in fine order; Erica elegans, dwarf and good; Leschenaultia formosa, dwarf; Azalea variegata, good; and Azalea Indica alba; Polygala cordifolia, Aphelexis purpurea grandiflora.

3rd Prize, 2*l.*, Mr. Kyle, gardener to R. Barclay, Esq., Leyton, for Coleonema gracilis, a dense bush, of a most graceful character; Azalea Danielsiana, a dwarf standard plant, well furnished with deep coloured flowers; Ixora coccinea, small; a very good Mirbelia Baxterii, on a globular trellis, 1½ foot high; a spreading dwarf plant of Azalea lateritia, with large flowers, quite a blaze; Polygala oppositifolia; Oncidium flexuosum, Aphelexis humilis, Erica Cavendishii, and Epacris grandiflora.

4th Prize, 1*l.*, Mr. Bruce, gardener to B. Miller, Esq., Tooting, for Ixora coccinea, tall; Chorozema Henchmanni, on a globe trellis; Chorozema ovata, on a small curved trellis, prettily bloomed; Leschenaultia formosa, and L. biloba; Aphelexis sesamoides, Eutaxia pungens, Erica ventricosa carnea, Azalea variegata, and Aphelexis humilis.

Extra Prize, Mr. Clark, gardener to W. Black, Esq., Muswell-hill, for Boronia serrulata, small; Pimelia decussata, a large bush; a large spreading double red Azalea; a very large plant of Epacris grandiflora, exceedingly well flowered; Erica perspicua nana, good; a dwarf Gesnera splendens, with fourteen flower-stems; a large old Erica hybrida, a thin Aphelexis humilis, Leschenaultia formosa, and Epiphyllum Ackermanni major, a dwarf plant, very nicely flowered.

Extra Prize, Mr. Slowe, gardener to W. R. Baker, Esq., Bayfordbury Park, for a free-grown Coleonema gracilis; a large Selaga Gillii, well flowered; Justicia carnea, with eight flower-heads; Pimelia hispida, Erica ventricosa superba;

Rondeletia speciosa, a good plant; Euthales macrophylla; a thin Aphelexis humilis; Vinca rosea, a good plant, 2 feet by 2; and Polygala cordifolia.

Extra Prize, Mr. Ayres, gardener to J. Cook, Esq., Brooklands, for Ixora coccinea, a very dwarf plant, with seventeen flower-heads; a very large Pentas carnea, with abundance of bloom; Erica propendens, small and good; Begonia parvifolia, a dense mass of flowers and foliage; Polygala oppositifolia; Azalea variegata, small, densely grown; Boronia serrulata, 3 feet; Leschenaultia formosa, a dwarf plant, flat at top; Pimelia spectabilis, a very good small plant; and Erica tricolor.

Extra Prize, Mr. Cockburn, gardener to the Earl of Mansfield, Kenwood.—This collection comprised Kennedya macrophylla, on a flat trellis, 3 feet by 2; Euthales macrophylla, bushy, 3 feet; Chorozema Henchmanni, on a two-feet globe trellis; a large Genista bracteolata; Stephanotus floribundus, on three-feet cylinder, with few flowers; Epiphyllum fulgidum, full of flower buds, but not out; Hydrangea japonica; a dense bush of Cassia corymbosa; a very nice Eriostemon buxifolium, forming a four-feet cone, with plenty of its starry blossoms; and Zichya glabrata, 4 feet by 3, on a flat trellis.

Besides the above, a collection was also shown by Mr. Kaye, gardener to B. D. Colvin, Esq., Norwood.

## SPECIMEN PLANTS.

*In new or old kinds; but plants only of decided merit, as objects of ornament, can be allowed to compete.*

### *Nurserymen and Private Growers.*

1st Prize 2*l*., Mr. Rae, gardener to J. J. Blandy, Esq., Reading, for Aerides odoratum; a magnificent plant, with eighteen large spikes of flowers.

2nd Prize, 1*l*., Messrs. Lucombe, Pince, and Co., Exeter, for a fine Cyrtoceras reflexus, trained 3 feet high to a cylindrical trellis, and having numerous bunches of its singular yellowish flowers.

3rd Prize, 10*s*., Mr. Pawley, Bromley, for Stephanotus floribundus, on a flat trellis 6 feet high by 5 feet in diameter, and beautifully flowered.

4th Prize, 10*s*., Messrs. Veitch and Son, Exeter, for Erica Cavendishii; a good plant, 2 feet high and 9 feet in circumference at the base.

Extra Prize, Messrs. Veitch, for Xanthosia rotundifolia, a large bush, 4 feet by 3.

Two extra Prizes, Mr. Bruce, for Pimelia spectabilis, 2 feet by 3, very full of flowers; and for Aphelexis humilis, a fine plant, 3 feet high by 2 feet broad.

Extra Prize, Mr. Franklin, Hampstead, for a large plant of a Pelargonium, named Frankliniana.

Two extra Prizes to Mr. Barnes, for Aphelexis humilis, 2 feet by 2, very good; and for a young and vigorous plant of Leschenaultia formosa.

Extra Prize, J. B. Crasswell, Esq., Exeter, for a large plant, 4 feet high, of Pavetta caffra, pretty well flowered.

Extra Prize, Messrs. Lucombe, Pince, and Co., for a large Erica intermedia.

Other plants exhibited in this section were—from Mr. Barnet, gardener to J. Buckle, Esq., York, a small Erica aristata major; from Mr. Beck, Isleworth, Achimenes picta, with beautiful foliage, but not much in flower; from Mr. Franklin, a small Azalea ledifolia; from Mr. Piper, gardener to A. Ward, Esq., Holloway, Calceolaria, Lady Constable; from Mr. Pamplin, Walthamstow, a very good Prostranthera violacea; from Messrs. Veitch and Son, Dracophyllum secundum, 3 feet; from Messrs. Henderson, Erica Albertii superb, a variety with small flame-coloured vestita-like flowers; from Messrs. Lucombe and Co., a large Fabiana imbricata; from Mr. Chalmers, gardener to E. Johnson, Esq., Waltham, a very pretty Azalea Danielesia, with a circular flat sloping face, 3 feet across; from Mr. Crisp, Leyton, a very fine Aphalexis speciosa, 2 feet; from Mr. Torrest, Kensington, three Statice macrophylla; from Mr. Wells, Leyton, a small Azalea lateritia; from Mr. Dickenson, gardener, Noel House, Twickenham, a plant of Miller's Petunia punctata; and from Mr. Don, a large scarlet Pelargonium, named Smithii.

### New or Rare Plants.

#### *In bloom. No plant will be considered as new which has previously been exhibited at the Society's exhibition.*

1st Prize, 2*l*., Messrs. Lucombe, Pince, and Co., for Dipladenia crassinoda, of which lovely plant we gave a figure and description last month.

2nd Prize (first), 1*l*., Messrs. Lucombe, Pince, and Co., for Vesalia floribunda, of which also we gave a figure last month, and a description in page 146.

2nd Prize (second), 1*l*., Messrs. Veitch and Son, for Fuchsia serratifolia; figured and described in our present number.

3rd Prize (first), 10*s*., Messrs. Veitch and Son, for Vesalia floribunda.

3rd Prize (second), 10*s*., Messrs. Veitch and Son, for Siphocampylus coccineus; see our third plate of last month, and description in page 146.

3rd Prize (third), 10*s*., Mr. Jack, gardener to R. G. Lorraine, Esq., Carshalton, for Dipladenia crassinoda.

Extra Prize, Mr. Barnes, for Luxembergia ciliosa, 2 feet high.

Extra Prize, Mr. Plant, for Petasostylis (Lisianthus) nigrescens, with small very dark maroon flowers, and of graceful habit.

In addition to the above, Messrs. Lucombe and Co. showed Burtonia brunioides, a plant with woolly linear leaves, and heads of yellow lotus-like flowers. From Mr. Henchman, of Edmonton, was Gastrolobium spinosum, a shrubby plant of rather straggling habit; the flowers are produced in heads of about 18, and of a yellow and deep red colour.

From Mr. Beck was Achimenes multiflora; and from J. Allnutt, Esq., Clapham, was a small plant of a crimson semi-double Azalea, named Grandiflora.

#### *Not in bloom, but remarkable for the beauty of their foliage or habit of growth.*

1st Prize, 2*l*., Messrs. Lucomb and Co., for Drimys Winterii, a fine hardy greenhouse plant, from Straits Magalhaens, the foliage of a rich green colour, and as large as Magnolia grandiflora.

2nd Prize, 1*l*., Mr. Stowe, for a large bush, 3 or 4 feet high, by as much in diameter, of that fine shrub Veronica speciosa.

No other prize awarded.

There were in addition, from Messrs. Veitch, a small plant of Anæctochilus setaceus, so remarkable for the beauty of its foliage, having brownish green velvetty leaves, closely netted over with golden and copper-coloured veins; from Mr. Bunney, Stratford, was a tall plant of Phyllocladus trichomanoides; and from Mr. Henchman were small plants of Brachysema villosa, Bossiæ Hookerii, Gastrolobium nova species, and Oxylobium nova species.

### Alpine Plants.

#### *In collections of 24 rare species.*

#### *Nurserymen and Private Growers.*

1st Prize, 1*l*. 10*s*., Mr. Wood, nurseryman, Norwood. This was a very neat collection of plants; amongst them we observed Linaria pilosa, L. Hepaticifolia, and L. pyrenaica; Anthyllis montana, Stachys Corsica, Galium Græcum, Alyssum minimum, and Saxifraga Aizoon, with several others.

No other competitor.]

## CLASS II.

### Natural Groups.

The exhibitions in this class are chiefly intended to display the effect of natural classification, by representing the habits and affinities of natural orders or of genera. The Cape Heaths were not only numerous, but displayed very fine condition. The plant of Cavendishii, shown by Messrs. Fairbairn, was a splendid specimen and deserving of particular mention.

The Orchidaceous plants were likewise generally very good. The season for greenhouse Azaleas being nearly past, but two collections were produced.

The Cactaceous plants, from their gorgeous appearance, always have great effect at Floral exhibitions; only two collections, however, were here shown, but these were very good.

### CACTACEOUS PLANTS.

*In collections of* 6 *species or varieties of the tall growing kinds, including Epiphyllum, Cereus, &c.*

*Nurserymen and Private Growers.*

1st Prize, 5*l.*, Mr. Green, gardener to Sir E. Antrobus, Bart. This collection consisted of a splendid plant of Epiphyllum speciosum; large plants, 5 or 6 feet high, of Epiphyllum Ackermannii and Cereus speciosissimus, both well flowered; Epiphyllum coccineum multiflora, and E. coccineum cœruleum, each about 3 feet high, and a perfect mass of bloom; there was also another plant, of some unnamed Epiphyllum, rather smaller, but equally well bloomed.

2nd Prize, 3*l.*, Mr. Bruce, for smaller plants, but scarcely less beautiful, of Epiphyllum Jenkinsonii, E. Ackermannii major, E. speciosum, E. speciosum grandiflorum, the latter with deeper pink flowers than the old kind, and having a tinge of scarlet in the colouring; Cereus speciosissimus, and a standard plant of C. flagelliformis, with a crown of deep pink blossoms.

### ERICACEOUS PLANTS.

*In collections of* 15 *species or distinct varieties.*

*Private Growers only.*

1st Prize, 8*l.*, Mr. May, gardener to E. Goodhart, Esq., for Erica perspicua nana, 2 feet by 2, good; E. denticulata moschata, a large mass of flower; E. mundula, 2 feet, very densely branched and flowered; an excellent E. propendens, a yard each way; a large E. Thunbergia, 4 feet; E. Beaumontiana a very dense bush of E. grandinosa; E. ventricosa superba, well furnished, but the flowers hardly out; E. mirabilis; a dense bush of E. Humeana, 3 feet by 3; E. ventricosa alba, very fine; E. odorata, rather thin, but well bloomed; E. hybrida, large; a very large E. vestita alba; and E. Westphalingia.

2nd Prize, 5*l.*, Mr. Barnes, for Erica elegans, dwarf, very good; E. favoides elegans; an excellent E. mundula, 2 feet across; E. ventricosa coccinea very finely bloomed; E. ventricosa superba, and E. ventricosa crusiflora, good plants; E. densa, not out; a bad E. propendens; E. gemmifera, very fine; E. Westphalingia, old; a small nicely-flowered E. Sprengelii; E. fastigiata lutescens; E. Humeana, a dense mass, 1½ foot through; E. Templeana, thin but neat; and E. daphnæflora, 2 feet by 2.

3rd Prize, 3*l.*, Mr. Taylor, gardener to J. Costar, Esq., Streatham, for a col- [illegible] E. Humeana, E. Bergiana, E. nigrita, E. vestita alba, and a larger old plant of E. Bowieana.

### *In collections of* 12 *distinct species or varieties.*

### *Nurserymen only.*

1st Prize, 4*l.*, Messrs. Fairbairn, Clapham. This collection contained a splendid E. Cavendishii, a yard high, and as much through at the base; E. ventricosa alba, E. ventricosa carnea, and E. ventricosa coccinea minor, beautifully flowered plants; E. Westphalingia, 2¼ feet through; E. tricolor, 1¼ foot by 2 feet across, good; E. tricolor nova, and E. tricolor elegans; E vestita coccinea, a very fine plant, 2 feet by 3 feet in diameter; E. Humeana, E. jasminoides, and E. odora rosea.

2nd Prize, 3*l.*, Mr. Fraser, Lea Bridge, who had a good E. Thunbergia, 2 feet by 2; E. Bergiana, about the same size; E. ventricosa coccinea minor, 1¼ foot through, and about 1 foot high; E. intermedia; E. campanulata, 2 feet high and a yard through; E. suaveolens; E. ventricosa stellata; E. Beaumontiana, 9 inches high, densely covered with flowers; E. mirabilis, E. mundula, and E. perspicua nana, each about 18 inches through, and quite dwarf; and E. propendens, a moderate-sized but magnificently-bloomed plant.

No other competitor.

### *In collections of* 8 *species or very distinct varieties.*

### *Private Growers only.*

1st Prize, 4*l.*, Mr. Hunt, for E. Sprengelii, 2 feet by 2; E. tricolor, rather shorter and as much through; and a variety of E. tricolor; E. suaveolens, 3 feet; E. perspicua nana, 1½ foot by 2; E. ventricosa tricolor, and E. Westphalingia, each 3 feet by 2; and a good E. odorata. These plants were generally free-grown thin plants, but well flowered.

2nd Prize, 2*l.* 10*s.*, Mr. Green, consisting of E. intermedia; E. gelida, and E. suaveolens, large old plants; E. Beaumontiana; E. Cavendishii, not out; a good E. ventricosa coccinea nana, 1 foot by 2; E. jasminiflora, well flowered; and a very good E. perspicua nana.

No other competitors.

### *In collections of* 6 *species, or very distinct varieties, grown in No.* 24 *or* 16-*sized pots.*

### *Private Growers only.*

1st Prize, 2*l.*, Mr. Bruce, for E. Cavendishii, 2 feet by 2; E. Bergiana, a beautiful little plant with drooping branches, 1½ foot high; E. propendens, 2 feet by 2, good; E. ventricosa coccinea minor, very dwarf; E. intermedia; and E. perspicua nana, very dwarf, and covered with flowers. These were all very pretty plants.

2nd Prize, 1*l.*, Mr. Roser, gardener to J. Norris, Esq., Streatham. These were particularly dwarf compact plants of E. Westphalingia, E. ventricosa coccinea minor, E. ventricosa coccinea nana, E. ventricosa superba, E. Bergiana, and E. hybrida.

Extra Prize, Mr. Reid, gardener to E. Wigram, Esq., Walthamstow, for dwarf nicely-bloomed plants of E. perspicua nana, E. ventricosa prægnans coccinea, and E. ventricosa coccinea minor; E. ampullacea vittata, E. denticulata moschata, and E. florida.

In addition to the above, Mr. Kyle had a collection of similar plants of E. ventricosa coccinea, E. ventricosa alba, and E. ventricosa prægnans coccinea, E. Beaumontiana, E. perspicua nana, and E. propendens. Mr. Slowe also had a collection of plants equally compact, of the following kinds:—E. florida, E. Beaumontiana, E. ovata, E. Bergiana, E. ventricosa coccinea minor, and E. vestita alba. These small plants, in many cases not more than from 9 inches to 1 foot high, and quite as much through, completely enveloped in blossoms, were perhaps equally interesting with the more valuable and magnificent specimens of giant growth.

4. C. Cambessedianus, white striped with deep purple.
5. C. Medius, deep purple with darker stripes.
6. C. Cartwrightianus, white with dark stripes in an early stage, but afterwards of a light blue with darker stripes.
7. ——————— Creticus, pale blue, with patches of white.
8. C. Clusianus, violet-blue.

Notes of the above are given by the Dean of Manchester, Hon. and Rev. W. Herbert. These pretty flowers appearing in autumn produce a lively interest, and render them deserving a place in every flower-bed near to a dwelling house.

GOMPHOLOBIUM BARBIGERUM. FRINGE-KEELED. (Bot. Mag. 4171.) Leguminosæ. Decandria Monogynia. A native of New Holland, and one of the most beautiful greenhouse plants. It is a moderate sized shrub, with twiggy erect smooth branches, flowering most profusely. Each blossom is near two inches across, of a very rich yellow. It has been introduced by Messrs. Lucombe and Pince, of Exeter. It deserves to be in every greenhouse.

IRIS IMBRICATA. IMBRICATED (CONVEX BRACTS.) (Bot. Reg. 35.) Iridaceæ. Triandria Monogynia. It is a showy perennial, hardy. The flowers are of a pretty lemon-colour. The Dean of Manchester communicated the specimen, &c.

LEIANTHUS LONGIFOLIUS. LONG-LEAVED. (Bot. Mag. 4169.) Gentianeæ. Pentandria Monogynia (Synonym, Lisianthus erectus.) A small half-shrubby plant, growing to two or three feet high, having spreading, drooping branches, which are clothed with drooping flowers. Each blossom is funnel shaped, tube an inch and a half long, of a pale-yellow colour. It is in the collection of Messrs. Lee, of Hammersmith Nursery, where it flourishes in the stove.

ODONTOGLOSSUM CERVANTESII. TOOTH-TONGUE. Orchidaceæ. Gynandria Monandria. (Bot. Reg. 36.) This very beautiful Odontoglossum belongs to the white-lipped section, and has been introduced by Messrs. Loddiges from Oaxaca. The ground colour of the entire flower is a delicate flesh, with band like marks towards the centre of a brownish-crimson, and the petals have a yellow streak up the centre. Each flower is two inches across, and has a delightful almond fragrance.

ONCIDIUM SPILOPTERUM. SPOT-WINGED. (Bot. Reg. 40.) Orchidaceæ. Monandria. A native of Mexico, which has bloomed in the collection of Messrs. Loddiges. It is a beautiful species, appearing to be intermediate between O. lanceanum and Carthaginense. The flower grows erect. Each blossom is a little more than an inch across. Petals and sepals of a rich brownish-purple. Lip very large, of a fine clear yellow, with slight spots of crimson at the base.

PLEROMA KUNTHIANA. MR. KUNTH'S PLEROMA. (Pax. Mag. Bot.) Melastomaceæ. Decandria Monogynia. Mr. Gardner discovered this fine flowering species in boggy situations on the Organ Mountains of Brazil, and sent it to the Glasgow Botanic Garden. It has recently bloomed in the garden of R. G. Loraine, at Wallington Lodge. It is an evergreen shrubby plant, producing its flowers in large thyrsoid panicles at the extremities of the branches. Each blossom is about three inches across, of a rich violet-blue in their early stage, changing to purple up the centre of the petals, and a pale violet at the edges. It is a fine hothouse plant, and well merits cultivation. Like several others of the Melastomaceæ, which grow naked, it requires to be cut in after blooming, so as to induce laterals, and make the plant bushy.

PHYLLARTHRON BOJERIANUM. MR. BOJER'S. (Bot. Mag. 4173.) Bignomaceæ. Didynamia Gymnospermia. A native of Madagascar; a small singular-looking shrub, having long and broad leaf-like petioles, but no real leaves. The flowers are produced on a very short raceme, of two or three in each. A separate blossom is about an inch and a-half across, funnel-shaped, of a pretty rosy flesh-colour, having two broad yellow lines in the throat.

RIBES SANGUINEUM FLORE PLENO. DOUBLE BLOOD-FLOWERED CURRANT. (Pax. Mag. Bot.) It has been raised from seed in the garden of the Earl of

Selkirk, at St. Mary's Isle, Kircudbright, in Scotland. Mr. Dick, the gardener, states that about one hundred seedling Ribes had been raised there in 1838, and in 1839 he had them planted out in the open ground, and among them was one, a double-flowering variety, and though no other had the least tendency to being double, there were several distinct colours of single-flowering varieties. The double variety has since then bloomed beautifully, and about three weeks later than the common varieties of Ribes. Its growth is as free, and its blooming as profuse, as the single blood-flowered, and it is as easily propagated.

The racemes of flowers vary from three to six inches in length. It is a valuable addition to this lovely tribe and species; and deserves to be an ornament in every garden. It is a fine plant, too, for forcing.

**Rhus diversiloba. Various-leaved Poison Oak.** (Bot. Reg. 38.) Anacardiaceæ. Polygamia Monæcia. A native of California, where it is a common bush. It proves to be a hardy deciduous shrub in this country, and has stood last winter against the wall in the London Horticultural Society's Garden at Chiswick. The flowers are very small, white, produced in short racemes.

**Sida (Abutilon) pœoniæflora. Pœony-flowered.** (Bot. Mag. 4170.) A native of the Organ Mountains of Brazil, and was sent by Mr. Lobb to Messrs. Veitch's, of Exeter, in whose plant-stove it recently bloomed. It appears to be a tall shrub or small tree. The flowers are produced towards the extremities of the shoots, two or three together, at the axils of the leaves. Each flower has the petals turning inwards, forming nearly a globe, of a beautiful red-rose colour with pale veins; the centre yellow. It is a pretty addition, and would make a fine conservatory plant.

**Strelitzia augusta. Great White-flowered.** A native of South Africa. The trunk grows to the height of eight or ten yards; a fine plant has recently bloomed at the Royal Gardens, Kew. The flower stalks are of a fine purple colour, and the flowers white.

## Noticed in the Botanical Register, not Figured.

**Epidendrum Lindenii.** Discovered on rocks, near Merida, by Mr. Linden. From the particulars attached to three varieties of it Mr. Linden sent, are, 1, flowers a bright carmine; 2, rose coloured; and, 3, a yellowish-orange. Messrs. Loddiges' possess a fourth, which has flowers whose centre is rose-coloured, and the upper half of the sepals and petals is a pleasing salmon colour. The habit of the plant is very like that of E. elongatum.

## Seen in Nurseries, &c.

**Hindsia longiflora alba.** The flowers are pure white, and of the size of the original blue species, produced in large heads, and of a sweet fragrance. Five plants are in bloom at Messrs. Henderson's.

**Burtonia brunioides.** A small New Holland shrub, producing terminal heads of yellow flowers. Messrs. Lucombe and Pince possess the plant.

**Hydrolea spinosa.** From South America, and requires a stove or warm greenhouse. It is a shrubby plant, the trunk rising three feet high, numerously branching, producing a profusion of brilliant blue convolvulus-shaped flowers. It blooms beautifully in the collection at Kew Gardens, and well deserves to be in every hothouse collection.

**Chœnostoma polyanthum.** A very neat dwarf, and handsome flowering greenhouse plant, producing numerous loose racemes of small salvia-shaped flowers, of a pretty light blue colour with an orange throat. It blooms nearly all the spring, summer, and autumn.

# PART III.

# MISCELLANEOUS INTELLIGENCE.

## QUERIES.

On Carnations and Picotees.—Having last season procured some slips of good Carnations and Picotees, yellow and other handsome varieties (originally raised from hybridized seed), the plants which were extremely healthy were this spring turned into beds previously prepared with the following compost, viz.—common earth, a small quantity of sand and of well rotted cow dung, and the same proportion of rubbish from old buildings of cob and lime. They are all now in bloom, producing only small single flowers of bad colours, the majority white. An answer in an early number by some grower of this class of flowers, as to the cause of such change, will much oblige.

North Devon; 19th July, 1845. An Old Subscriber.

On Scarlet Pelargoniums.—I procured, early this spring, some scarlet-flowered Geraniums for planting out in beds, and had them turned into a very rich loamy soil. They grow tremendously, and the leaves are six inches across, but few flowers are produced, and the beds are nearly all green vigorous foliage to appearance. It appears to me that the sort supplied me is of too vigorous a growth. I had not a name with it. Are there not some kinds properly suited for beds, if so, please name them and where to be obtained.

A Beginner.

[Frogmore Scarlet is peculiarly adapted for the open beds. It is of a dwarfish habit, a most profuse bloomer, and of an intense rich scarlet colour. The new dwarf, General Tom Thumb, is also an excellent kind for the purpose; it grows very dwarf, blooms profusely, and of a deep rich scarlet. Another kind called the Huntsman, is very much in the way of the Frogmore Scarlet, but a little more vigorous. The above kinds are the best, and every way suited. They may be had at the general nursery establishments at a low price.—Conductor.]

## REMARKS.

On Stocks.—In a recent number of the Cabinet an article on Stocks was given, and the following additional ones being extracted from the "Gardeners' Chronicle," if inserted, will I hope further tend to the successful cultivation of this lovely flower:—

"There are few but must have been struck with the beauty of the Stocks which are occasionally to be seen in the well managed garden of the cottager—the result of his care and attention, and which is a lovely proof of the quiet and domestic habits of the inmates. Indeed, I never see a fine bed of Stocks, but it recals the early scenes of my youth, when the seed of emulation first began to develop itself, and when hope shed a cheering ray over youthful anticipations. The cottager sows his Brompton or Giant Stock in March; he has thus a strong growth before winter, and if he has successfully preserved them until spring he will then be rewarded with what is the characteristic trait of the variety—a splendid spike of flowers. The gardener and others, who have various and better means for the preservation of their Stocks, will sow the Brompton Stock in the latter end of June or beginning of July, and Scarlet 10-week and German varieties in the second week in August; and to prevent disappointment from any variation of the season, he will again sow about the 1st of September. The practical gardener will require no detailed directions how to preserve his Stocks through the winter; he will use those means at his command best adapted for the purpose; they require simply to be kept in a dry and sheltered situation with protection from severe frost, and to be shaded from the sun whilst frosty weather continues. My own practice, however, is to pot the scarlet, Brompton or Giant, three in a pot, and the 10-weeks from five to seven in a pot, and before the frost sets in the pots are plunged in dry coal-ashes, in a frame, giving abundance of air at every favourable opportunity.

"As soon as the severity of the winter is past, and the plants begin to make a fresh growth, holes are dug out in the borders to the depth of 18 inches, and filled up with two-thirds of old or decomposed turfs, which have been used in the frames for the growth of Melons, &c. To this is added one-third of burnt clay, or whatever may be at hand, such as vegetable refuse, the scourings of ditches—after undergoing the process of burning. The plants are turned out of the pots with the ball entire and are placed in the compost, which is firmly pressed against the ball with the foot, to prevent rapid growth, a firm compact stem being essential to support the noble spike of bloom which the double flowering plants of the scarlet Brompton Stocks produce.

"Complaints have been frequently made that the German varieties of the Stock cannot be kept true to their kinds from seed saved in this country; but with the selected sorts which I have grown, I have never found the least difficulty, both in regard to the distinctness of the sorts, and the number of plants producing double flowers; these, in fact, were equal to those in every respect which were raised from imported seed. Every one acquainted with the culture of the Stock must have observed the length of time it requires to mature its seed; hence, we seldom can obtain good seed from spring sown 10-week Stocks. Besides, if several varieties are grown closely together, at the advanced period of the season in which they bloom, most of the winged insects will have undergone their various transformations; and their nectar-sipping propensities will explain the cause of the complaint already alluded to.

"It will, however, be expected that I should state the method I adopt to obtain good seed to produce double flowering plants; and here I would remark, that the greatest difficulty is with the scarlet Brompton. It is well known that a bloom of the single Stock has only four petals, but where proper attention has been previously paid to the saving of the seed, a disposition to double flowering of the single ones will frequently take place; the plants are, therefore, carefully examined, and those flowers that have five or six petals are only allowed to produce seed pods; but as it frequently happens that a sufficient number cannot be obtained to produce a sufficient quantity of seed, those plants are selected which grow beside double flowering ones. The first seven or eight blooms are picked off from the bottom of the spike; the next seven are left to produce seed-pods; and to prevent exhaustion the upper part of the spike, after the pods are well formed, is broken off. The lateral shoots continue to produce blossom, but none are allowed to produce seed-pods. All that is required in saving seed from the 10-week, &c., is not to permit more than seven or eight pods to mature their seed on one plant; after the seed is ripe, it is best preserved in the seed-vessels until it is required to be sown."—*Gardeners' Chronicle.*

## LONDON HORTICULTURAL SOCIETY, REGENT-STREET.

June 3.

Of new plants a very pretty variety of the handsome greenhouse plant Hindsia violacea was produced by Messrs. Henderson, of Pine Apple-place. There was no material difference between this and the species just mentioned, except in the flowers, which instead of being of a fine porcelain blue were white, a colour into which blue is very liable to change. It was said to be very fragrant, and will no doubt form a very interesting variety. From the same collection was also a yellow variety of Gompholobium polymorphum, a pretty twining New Holland plant. A certificate was awarded for the Hindsia.—Messrs. Veitch and Son, of Exeter, sent Calceolaria floribunda, a Peruvian species, having small yellow flowers, and a cut specimen of a Eucalyptus, bearing little tufts of white blossoms. The latter was said to have been taken from a tree 14 feet in height, and was stated to have stood the winter, such as it is in Devonshire, without injury, for six years in an exposed situation, in their nursery at Exeter. All the kinds that have been tried having proved too tender to stand the severity of the weather without protection in the Society's garden at Chiswick, and some Eucalypti being much more hardy than others, it is worth ascertaining in different parts of the country what sorts are best adapted to our climate. A certificate was awarded for the Calceolaria.—From Mr. Piper, gardener to A. Ward, Esq., was an exceedingly well-grown plant of the Calceolaria Lady Constable, covered with flowers, and three Schizanthus retusus. A certificate was awarded for the Calceolaria.—Mr. Conway, of Brompton, sent a plant of his Cactus called Conway's Giant, a kind distinguished for the large size of the flowers, and for the bright red colour which they possess.—From Mr. Jackson, of Kingston, were Ononis rotundifolia, an Epidendrum from Guatemala, and two plants of Comarostaphylis, a nearly hardy Mexican shrub closely related to Arbutus. In the fruiting season it is covered with pretty dark purple berries, which give the plant a remarkable appearance.—From the garden of the Society were Stanhopea oculata, remarkable for its strong odour. Cypripedium barbatum, the useful Epidendrum gladiatum, a fine Brassia guttata, three Begonias, a good Erica intermedia, and several well-grown Cinerarias, together with Glossocomia ovata, a hardy Indian herbaceous plant, producing pretty pale-coloured bell-shaped flowers, which are elevated on long stalks above the foliage. Along with these was the Persian annual Cochlearia acaulis, a species of stemless Scurvy-grass, which forms little green patches closely studded with small pale starlike flowers.—Finally, a Hyacinth bulb was produced which had been grown in water, and which had had the base all rotted away. On the decayed part being removed, however, and the bulb placed under circumstances favourable to vegetation, nearly all the remaining portions of the scales produced young bulbs; thus showing with what facility such things may be increased by any part of the scales, even when the portion from which the young bulbs usually grow has been removed.

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Drainage for Pots.—I am but a novice and amateur; yet little as my experience is, I have found in it the incalculable good effects of perfect drainage, and have long used a material that I have not anywhere seen noticed, although amongst the wise men of the profession it may be quite familiar—that of using the round cinder that falls from steam-engine furnace-fires. It is clean and half vitrified, and agrees with the health of plants. I first place a few crocks to keep the hole free, then one or two inches of these ashes, then a little Moss, and, lastly, the lumpy soil, &c.; by which I effect in a superior way all that is needed. The advantage that the plan possesses is, that no worms will go through these ashes, and they make a most perfect drainage.—*Gardeners' Chronicle.*

On Luculia gratissima.—In a former Number of the Cabinet, in 1844, I observed a valuable article inserted on the culture of the Luculia gratissima, but as there are many persons who have not the means at command to grow it in a conservatory, &c., I beg to remark that by the following attention I grow it admirably in a pot. I find it is a point specially to be attended to, not to stimulate it to grow in spring and the early part of summer, as it is not naturally inclined to do. I keep my plants in the greenhouse till about the middle of June, then plant them out balls entire in the open border, in a situation that is warm, but shaded from mid-day sun. I take them up again, keeping all the small fibrous roots I can uninjured, the first week in September, putting them into additional sized pots, and place them in a vinery and plant-stove of moderate temperature; they grow strongly and soon produce heads for blooming, which display their beauty and fragrance nearly through winter.

Hants. Senex.

On Wireworm.—To destroy this pest most effectually:—Towards the end of last year, when my Carnations and other plants had all been removed from my flower-beds, and previous to the latter being turned up for exposure to the winter frosts, I took sulphuric acid, in the proportion of one gallon to twenty of water, and applied the mixture plentifully to the soil. In two days I again repeated the operation, having previously turned up the soil and seen that it had been well pulverized. After the lapse of ten or fourteen days I gave a plentiful application of powdered lime, and shortly after turned the soil up in ridges as usual. The result has been, that it is now a rare thing to see a wireworm where previously I had often killed a hundred in half an hour, and where my plants were eaten up in a wholesale manner. Let any one collect a number of these most destructive pests and put them among soil in a box, and then apply the above mixture. Let him look for them next morning and communicate the result; or, indeed, in half an hour after. This can be used on a large scale as well as on small flower-beds.—*Gardeners' Chronicle.*

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ON SOME OF THE FINEST HOTHOUSE PLANTS.—Most of the superb flowering hothouse kinds of Gardenias, Thunbergias, Gloxinias, Clerodendrons, Begonias, Russelias, Ruellias, Achimenes, &c., with many of the fine Orchideous plants, if grown in the usual higher temperature until the blossom buds are about half grown, may then be brought into the greenhouse, or conservatory in the summer months, where they will display their beauties to more than double the extent of time which they would do in the hothouse, and thus form a brilliant ornament to the greenhouse, &c. I have adopted the plan for the last two summers, and so far on the present, with perfect success. It is well worth the trial.

CLERICUS.

ON HYBRID LILIES.—The Dean of Manchester, in a recent visit to Ghent, states that he saw in the nursery of Mr. Van Houtte the finest Orange Lily that has been produced, and which had been raised from Lilium atropunctatum, fertilized by a strong orange lily called L. croceum. The new variety is of middle stature, large heads of flowers, and the blossoms very large and brilliant, and will prove to be a very valuable acquisition to the flower garden. We remarked in one of our previous volumes that Mr. Groom, florist, of Clapham, near London, had paid considerable attention to the impregnating lilies of the hardy kinds with the more delicate sorts, with a view to obtain the most brilliant and distinct varieties, and his success was highly encouraging. He had the most beautiful kinds we ever saw, deserving to be in every flower garden. We do hope further attention will be given to raising hybrids of this now so extensive and splendid a family of flowers. The various forms, colours, habit, &c., give a very ample field for satisfactory attempts, in combining, too, the many sorts of Martagons, japan kinds, orange, white, Jacobea, Guernsey, &c. The most inferior variety that could be raised would be an ornament, and deserving a place in the flower border, whilst the probabilities would be great of producing superb novelties.

Now that glass is so cheap, a bed might be covered to afford facilities for successfully impregnating an entire bed of mixtures, and obtain well-ripened seed. The result would amply repay.—CONDUCTOR.

ON THE FINE BLUE DWARF GENTIAN.—Noticing in the 11th volume of the CABINET some suitable remarks on the culture of the above named lovely plant, I pursued the plan recommended with success. Last season, however, I divided my plants the first week in July, but not into very small patches, and replanted two beds into a rich sandy loamy soil. I shaded them for several days; they soon struck fresh roots, were finely established before winter, endured that without injury, and bloomed vigorously and profusely this spring. To divide and replant at the season mentioned I am persuaded is the proper time, and not in autumn as is generally done, or in early spring as done by some. My double daisies I treated the same, and they succeeded admirably.

CLERICUS.

ON CANNA IRIDIFLORA.—This fine crimson-flowered species is generally grown in the hot-house, and is seldom seen in vigour, the flowers being small. I had several plants, and last year I grew two in a greenhouse, and they flowered freely and vigorously; two others I planted out in the conservatory border, and they flourished amazingly, the flower stems rising four yards high. Its large noble leaves and splendid flowers made it magnificent. I have had two plants grown in the greenhouse till the middle of June, and then turned them out into the open border of a south wall, near to the angle of a hot-house, and the plants are now seven feet high, showing admirably for bloom. In warm situations I am fully satisfied it will make one of the noblest out-door summer ornaments.

A Flower Gardener.

## FLORICULTURAL CALENDAR FOR AUGUST.

Greenhouse Plants.—All exotic trees and shrubs belonging to this department, that are in want of larger pots, or refreshment of new soil, should (if not performed last month) immediately be done.

*Pelargoniums*—Plants done blooming should now be cut down; this will induce them to push fresh shoots; when they become two inches long, the plants should be repotted (not before), shaking off the old soil, and replacing it with fresh compost. The young shoots thus produced will require thinning, those cut away clean may be struck where required. Calceolarias should be increased. Verbenas should now be increased in order to get well established plants to endure winter. This is the proper time to propagate Aloes, Sedums, and all others of a succulent nature, by means of suckers or bottom offsets; when detached from the parent, they should be potted singly into small pots, using light dry compost, and watering sparingly till they have taken root. In the first or second week at furthest, inoculation may be performed on any kinds of the Citrus genus. Camellias, to bloom early, should be placed in the greenhouse.

Flower Garden.—Propagate by means of slips, and parting the roots of any double-flowered and other desirous fibrous-rooted perennial plants done flowering. Auriculas should be cleared of all dead leaves, and shifted into fresh pots; prick out of the seed-bed, where it was omitted last month, Seedling Auriculas and Polyanthuses, and place in a shady situation; seeds may also be sown of both kinds in boxes or pans. Carnations may still be layered; also double Sweet-Williams; the earlier in the month the better. Those which were layered four or five weeks ago will now be sufficiently rooted to be taken away and planted in beds or pots. Also plant out Pink pipings, which were put in i June, or slips may be taken off and struck (see Vol. XII., article on doing it successfully). Sow seeds of all kinds of bulbous-rooted plants in pans or boxes such as Spring Cyclamen, Anemones, Ranunculuses, &c. &c. Those kind o bulbs wanted to increase should be taken up if the leaves be decayed, and th offsets taken off. Transplant into nursery beds seedling, perennial, and biennia plants sown in spring. In dry weather gather those flower-seeds that are rip of any desired kinds. Plant out such kinds of autumn flowering bulbs as ye remain unplanted. Heartsease, towards the end of the month, should be propagated by slips, put into a shady border, and kept quite moist till they hav taken root; these will form fine strong plants for blooming the spring following Buds of Roses may still be put in; the earlier the better. Any budded earl and looking fresh may have the bandage loosened to allow room for swelling All shoots below the bud should be rubbed off. Chrysanthemums should b topped, if not done last month, in order to form compact heads of flowers. Th tops put in make dwarf, late blooming plants. Mignonette to bloom durin winter should *now* be sown in pots.

*Ranunculuses*, &c., roots of, should now be taken up, and gradually and wel dried.

Dahlias.—Thin out the shoots where large flowers are required. Water shoul be given copiously every evening during dry weather. A strata of manure shoul be laid over the roots, which tends to promote the vigour of the plants.

*PELARGONIUMS.*

*1. HEIDOS (HOYLE)* *2. DESDEMONA (BECK)*

THE

# FLORICULTURAL CABINET,

SEPTEMBER 1st, 1845.

## PART I.

## EMBELLISHMENTS.

### ARTICLE I.

### PELARGONIUMS—1. HEIDOS (HOYLE'S). 2. DESDEMONA (BECK'S).

THE original species of Pelargoniums were, with but a small number of exceptions, entirely introduced from the Cape of Good Hope—amounting to upwards of 200 species—and many of them are regarded with esteem, being adorned with gay-coloured flowers, and invariably having fragrant foliage. They, however, possessed none of the regularity, richness of colour, or delicate shades, which so greatly distinguish those varieties that are now, during a long season in the year, the most captivating ornaments the cultivator possesses: thanks to the zeal of the skilful hybridizer, who has so transferred the loose and simple garb of this stranger from a foreign clime, to the uniform and beautiful dress of our present family; whose colours are not only novel and of singular beauty, but of every gradation of tints and depth which one can well imagine.

The two varieties represented in the accompanying embellishment we have not so distinguished, because they possess *all* the most desirable qualities of a first-rate flower, but on account of their combining with several good points in shape, a novelty and distinction of character which will render each an attractive object, either in collections at exhibitions or in the greenhouse. Both kinds will, we believe, be offered for sale in the ensuing season: Heidos is a seedling raised by Mr. Hoyle of Guernsey; and Desdemona is one of the many beautiful seedlings raised by Mr. Beck of Isleworth.

The cultivation of Pelargoniums has already been so fully treated on in our pages, that it is unnecessary we should here add any observations thereon.

## ARTICLE II.

### THE GRAND FLORAL EXHIBITIONS OF THE METROPOLIS.

ROYAL BOTANIC SOCIETY, *Regent's Park.*

(*Continued from p.* 209.)

### CLASS III.

### FLORIST'S FLOWERS, IN POTS.

THE most engaging plants in this class, and indeed we may say at the exhibition, was the Pelargoniums; by which almost an entire tent of 120 feet long was occupied; presenting a very brilliant effect, and the superior condition in which nearly every plant was produced testified that their cultivation and management, has reached a high degree of perfection. The Fuchsia having now become a very popular flower, and being too so exceedingly graceful and ornamental in appearance, we hope to see their exhibition better encouraged another season. In the present schedule of the Society is offered an award of 3*l.* for the best half dozen Calceolarias, whilst only 2*l.* is offered for twelve Fuchsias. Surely they are deserving of a better proportion than this. Four collections of them were shown, the plants in those which obtained the two highest prizes, presented the appearance of having been carefully and excellently treated, each being a compact bush of from two to three feet high, by nearly as much in diameter.

### PELARGONIUMS.

*In collections of* 12 *new and distinct varieties, grown in No.* 24 *pots.*

*Private Growers.*

1st Prize, 7*l.*, Mr. E. Beck, Isleworth, for exceedingly well bloomed plants of the following: Conflagration, Zanzummin, Sir R. Peel, Pulchellum (Foster's), fine; Sultana, Susannah, Leonora (Beck), good; Mark Anthony (Beck), fine; Matilda (Foster), Lord Chancellor, Favourite (Beck), and Lurida (Beck).

2nd Prize, 4*l.*, Mr. R. Staines, New Road, Paddington, for scarcely less deserving plants of Alice Gray (Wilson's), Adonis (Staines), Superba (Wilson's), Sunrise, Hebe, Erectum, Duke of Cornwall, Enchantress (Wilson's), Lady Sale (Gaines), Sunbeam (Staines), Madeline (Lumsden's), and Roulette (Garth's), fine.

3rd Prize, 2*l.*, Mr. Cock, Chiswick, for Cyrus, Duke of Cornwall, Erectum, Emma, Unit, Sir R. Peel, Hector (Cock's), fine; Symmetry, Rosetta superb, Eliza Sauvage, good; Jupiter, and Angelica.

### *Nurserymen.*

1st Prize, 7*l.* Mr. N. Gaines, Battersea, for Priory King, Excelsa, Pirate' Lady Mildmay, Cotherstone, Ackbar, fine; Neptune, Lady Sale, Achilles, fine; Madeline, King of Beauties, and Hermione.

No other competitor.

### *In collections of* 12 *distinct varieties grown in No.* 12 *pots.*

### *Private Growers.*

1st Prize, 6*l.*, Mr. Parker, gardener to J. H. Oughton, Esq., Roehampton. The varieties were, Priory Queen, a fine specimen; Gipsy Queen, Erectum, Caroline, Bridesmaid, Master Humphrey, Emperor, Hebe, Mabel, fine, with large trusses; Virgo, Duke of Cornwall, and Superb. All very successfully cultivated.

No other competitor.

### *Nurserymen.*

1st Prize, 6*l.*, Mr. N. Gaines, Battersea, for Madeline, Coronation, Lady Sale, Lady Isabella Douglas, Albina, Erectum, Caroline, Nymph, Una, Comte de Paris, Juba, and Victory. All well grown.

2nd Prize, 3*l.* 10*s.*, Mr. Pamplin, Walthamstow, for tolerably grown plants, though not well in bloom, of the following kinds: Alice Grey, Sir Walter Scott, Ajax, Superba, Prince Ernest, Achilles, Anna, Enchantress, Countess of Wilton, Vesta, Hesperis, and Camilla.

No other competitor.

### *In collections of* 8 *varieties.*

### *Private Growers only who do not compete in the larger collections.*

1st Prize, 3*l.* 10*s.*, Mr. Coysh, gardener to R. Hudson, Esq., Clapham, for Matilda, Phillis, Witch, Flash, Hebe, Madeline, Nymph, and Enchantress.

2nd Prize, 2*l.*, Mr. E. Bell, Chelsea, for Luna, Paragon, Alice Grey, Nymph, Arabella, Superb, and Roulette.

## ROSES.

### *In collections of* 20 *distinct varieties grown in pots.*

### *Nurserymen and Private Growers.*

1st Prize, 7*l.*, Messrs. Paul and Son, Nurserymen, Cheshunt, for compact plants, profusely in bloom of the following: Aubernon, pale crimson; Great Western, bright red, crimson, large, globular, and good; Louis Buonaparte, bright rose; Edward Jessie, light purple crimson, good; Belle Marie, large, rose; Lord John Russell, La Victorieux, good; Madame Laffay, large, crimson; General Allard, rose, good size and shape; Velours Episcopal, deep crimson purple; Taglioni, white, creamy centre, good; Coup d'Hebe, flesh pink, globular, and beautiful; Duchess of Sutherland, blush; Madame Plantier, white; Rivers, rosy pink; De Neuilly, osy carmine, cupped and fine; Comte de Paris, lilac crimson, fine; Lane, shaded crimson; Comtesse de Latepede, and Isaune Labelle.

2nd Prize, 4*l.*, Messrs. Lane and Son, Nurserymen, Berkhampstead, for Eliza Sauvage, large deep straw; Emilie Courtier, bright crimson; Caroline, delicate pink, deeper centre; Psyche, small crimson; Lane, Marjolin, good deep crimson; Theresita, bright carmine; Comte de Paris, Josephine Malton, straw with buff centre; Phœnix, purplish red; Queen (Bourbon), small, delicate salmon; Armosa, rosy blush, fine: Proserpine, reddish crimson; Acidalie, white, regular and very double; Henry V., bright red; Augustine Marget, light rose; William Jesse, lilac and crimson shaded, globular, large, and very good; Therese Isabelle, white; Queen (perpetual), bright crimson; and Louis Buonaparte.

3rd Prize, 2*l.*, Mr. Laing, Nurseryman, Twickenham, for Mima, cream, fine; General Soyez, light crimson, fine; Lady Alice Peel, rosy crimson, fine; Augustine Mouchelet, crimson, cupped and good; Bride of Abydos, blush-white, large; Clara Sylvain, white; Triomphant, rosy crimson: Triomph de Gand, Abbe Moiland, crimson red, very good; Mont St. Bernard, flush; Dr. Marx, rosy lilac; Duchesse de Montebello, pink; Belle Emilie, Mrs. Bosanquet, creamy white, large; Cramoisie superieuse, reddish crimson; La Renomme, Cels Multiflora, Armosa, and the common Provence.

Extra Prize, Mr. Steadman, Isleworth, amongst which, we observed tolerable blooms of Devoniensis, Harrisonia, and Prince Albert.

### *In collections of* 10 *distinct varieties grown in pots.*

### *Private Growers only.*

1st. Prize, 4*l.*, Mr. E. Beck, Isleworth, for superior grown plants of the following: Caroline, Nouvelle Heloise, compact, shaded blush; Madame Joly, blush white; Queen (Bourbon), Devoniensis, Armosa, Lyonnais, fine; Celimine, delicate pink, cupped; Pauline Plantier, and Augustine Marget.

No 2nd or 3rd Prizes awarded.

Extra Prize, A. Rowland, Esq., Lewisham, for moderately good specimens of Madame Laffay, Eugene Hardy, blush; Reine de Naples, Triomphe, Lane, Armosa, Reine de la Guillotiere, shaded-red crimson; Mrs. Bosanquet, Marquise Boccella, pale pink; and Lavinia Duval.

## CALCEOLARIAS.

### *In collections of* 6 *distinct varieties, grown in No.* 12 *sized pots.*

### *Private Growers.*

1st Prize, 3*l.*, Mr. Garrod, gardener to R. B. Forman, Esq., Hampstead, for Magician, fine; Sir R. Sale, Queen Victoria, Corymbiflora, and Queen of Beauties.

2nd Prize, 2*l.*, Mr. Wren, gardener to J. Huskisson, Esq., Holloway, for Standishii, King, Lady Sale, Lady Constable, fine; Corymbiflora, and Artilleryman.

3rd Prize, 1*l.*, Mr. Kinghorn, gardener to A. Murray, Esq., Twickenham, for the following superior kinds:—Grandis, Mary Queen of Scots, Marquis of Bute, General Robertson, extra; King of Saxony, beautiful; and Vesta.

### *Nurserymen.*

1st Prize, 3*l.*, Messrs. Hendersons, Edgeware-road, for well-managed plants, each about two feet high and as much in diameter, of Standishii, Lady Sale, Andromache, Lady Sale (Standish's), Prince Albert (Green's), and Rosea grandiflora, fine.

2nd Prize, 2*l.*, Mr. N. Gaines, Battersea, for compact specimens of Standishii, Desirable, Sunbeam, Candidate, Jamie Forrest, fine; and Conductor.

No other competitor.

## FUCHSIAS.

### *In collections of* 12 *distinct varieties, grown in No.* 12 *sized pots.*

### *Nurserymen and Private Growers.*

1st Prize, 2*l.*, Messrs. H. Lane and Son, nurserymen, Berkhampstead, for Paragon, Moneypenni, Venus Victrix, Gem, Beauty Supreme, Norfolk Hero, Achilles, Britannia, Rogersiana, Grovehillii, Mrs. Lane, fine; and Brockmanii.

2nd Prize, 1*l.*, Mr. N. Gaines, nurseryman, Battersea, for fine bushy plants, 2½ feet high by 2 feet across, of Favourite (Gaines), a rather pretty little flower, after way of Venus Victrix; Duke of Wellington, Vesta, Coccinea Vera (Smith's), Goldfinch (Harrison's), Reflexa, Coronet, Madonna (Harrison's), Cassandra, a good light flower; Priam, Britannia, and Monarch.

Extra Prize, Mr. Kendal, nurseryman, Stoke Newington, for Goldfinch (Harrison's), Stanwelliana, Coronet, Young May Morn, pretty; Robusta, Vesta, Erecta elegans, Gigantea, with some immense blooms; Chandleri, Globosa grandiflora, Defiance, and Venus Victrix.

Extra Prize, Mr. Robinson, gardener to J. Simpson, Esq., Pimlico, for Vesta (Smith's), Goldfinch (Harrison's), Iveryana, Queen (Pawley's), pretty; Formosa elegans, Chandlerii, Hope (Barnes's), Exoniensis, Eppsii, Modesta, Venus Victrix, and Coronet.

### CINERARIAS.

### *In collections of 4 distinct varieties, grown in No. 12 sized pots.*

### *Nurserymen and Private Growers.*

1st Prize, 1*l.*, Messrs. Lane and Son, Berkhampstead, for Laverstonia, fine; Eclipse, Diana, and Splendens.

2nd Prize, 10*s.*, Mr. Gaines, Battersea, for Matilda, General Tom Thumb, Britannia, and Compacta.

Extra Prize, Messrs. Henderson, Edgeware-road, Paddington, for Fanny Elsler, Beauty of Wortham, white, with a slight pink tip, pretty; Washington, and Enchantress Superb.

## CLASS IV.

## CUT FLOWERS.

In this class the competition was principally confined to the Pansies, the collections of which contained some fine blooms, especially those of Messrs. Brown of Slough, and Turner of Chalvey; to the former of which the first prize was given, although there were no names of the varieties attached, and the 10th rule of the Society should, therefore, have excluded them. We hope the Society will in future direct the judges strictly to enforce this rule in all cases, however meritorious the productions may otherwise be, because the mere information of the name of a successful competitor is of no value whatever to that portion of the public who have not attended the show; and those persons who are present feel mortified instead of gratified in seeing the flower of a fine variety, which they would like to possess, without a chance of knowing its name. In results of this nature we may readily see the reason why the interest and usefulness of some Floral Societies, who permitted such exhibitions, so soon ceased.

### PANSIES.

### *In stands of 36 varieties.*

### *Nurserymen and Private Growers.*

2nd Prize, 10*s.*, Mr. Turner, florist, Chalvey.—We observed some excellent blooms of these fine varieties: Purple Perfection, Rubicon, Hannibal, Eclipse, Curion, extra; Malibran, Regulator, Triumph, and Pizarro.

**Extra Prize, Mr. Bragg, florist, Slough.—Amongst these were large blooms of Exquisite, Belaero, very fine; Malibran, Cyclops superb, Jehu, Prince Albert, and Sulphurea elegans.**

**Extra Prize, Mr. Parsons, gardener to A. George, Esq., Enfield.—These were good blooms; but we did not observe any particular variety.**

**Besides the above, stands were exhibited from Messrs. Brown and Attwell, nurserymen, Uxbridge; Mr. Henbury, florist, Croydon; Mr. May, florist, Tottenham; Mr. Hall, Enfield; and Mr. Blake, Wadermill.**

### VERBENAS.

*In stands of 24 varieties, each variety to be shown in a single truss.*

*Nurserymen and Private Growers.*

Extra Prize, Mr. Turner, florist, Chalvey, for Fortune-teller, Excelsa, Giant, Jesse, Orange Perfection, Alba Superba, Longiflora, Boule de Feu, Princess Royal, Enchantress, Rose d'Amour, Atropurpurea, Charlwoodii, Amethyst, Princess Alice, Minstrel Boy, Atrosanguinea, Ignescens, Messenger, Elegans, Rosea multiflora, Splendens, Neillii, and Zeuxes.

No competitors.

### DEVICES OF CUT FLOWERS.

*In length each device not to occupy more than 8 feet by 4 feet in width; and the flowers to be so placed as best to illustrate the principles of arrangement and combination of colours, as published by acknowledged authors.*

1st Prize, 3*l*. Mr. W. Burton, Fitzroy-place.—This design was tolerably well managed, and embraced, besides the flower-garden, some rockery and rustic work.

No competitors.

### BRITISH PLANTS.

*In collections of not less than 25 different fresh and wild specimens, illustrating the exogenous portion of the British Flora.*

1st Prize, 3*l*., Mr. Smith, gardener to J. Anderson, Esq., Regent's Park.

2nd Prize, 2*l*., Mr. D. Spriggins, Hertford.

In addition to the above, seven other collections were exhibited, some of which were not properly classified.

*In collections of not less than 25 species, illustrating the endogenous portion of the British Flora.*

1st Prize, 3*l*.. Mr. Smith, gardener to J. Anderson, Esq.

2nd Prize, 2*l*., Mr. A. Williamson, Kew Gardens.

There were three other competitors.

## CLASS V.

### SEEDLINGS.

These were somewhat numerous, especially Calceolarias, no less than forty-nine of them being shown: a slight improvement in some of the varieties was discernible, but their general character was too much in the old spotted style. Mr. Kinghorn's flower, which received the first prize, and which also had the first prize at the Horticultural Society's show in May last, was the most distinct in character, and of very good shape. The Pelargonium prizes were all obtained by Mr. Beck, of Isleworth, who certainly has been very fortunate in raising so many really good varieties. Four prizes were awarded to seedlings of 1844, and we should have liked the judges to have been more liberal by adding two others, one to Othello and the other to Desdemona, because they not only possess an excellent shape, but are of colours much wanted. Othello is a distinct light purple, with very dark maroon upper petals, very smooth, too, and regular. Desdemona possesses very delicate blush-white lower petals, and upper ones of a deep rich velvetty crimson-red colour, surrounded with a white belt; it has a little too much unevenness about it, but the distinct and beautiful appearance of its character is sure to make it a favourite, both for show and greenhouse. None of the Cinerarias were considered by the judges as worthy of a prize; their prevailing fault was a looseness in shape, caused by the petals not growing close enough together, which is one of the most requisite qualifications to a good flower. Many of the Pansies had scarcely a redeeming quality in them. The production of a flower, however, allows the exhibitor free admission to the show; and we dare say this may occasionally explain the appearance of worthless varieties.

## PELARGONIUMS.

### *Bloomed in* 1844.

1st Prize, 1*l.*, Mr. E. Beck, Isleworth.—With Aurora, a very smooth and even flower, of a bright clear crimson-red colour, with a large dark spot in the upper petals; it is of good size, and will become an esteemed show flower. It was exhibited last year at the South London July Show.

2nd Prize, 15*s.*, Mr. E. Beck, for Arabella, described in our last Number, p. 173, it having been awarded a prize at the Horticultural Society's Show.

Extra Prize, Mr. E. Beck, for Rosy Circle. This obtained the first prize at the Horticultural Society's Show, and a description of it is also given in p. 173.

Extra Prize, Mr. E. Beck, for Bellona, a good shaped flower, of a rosy-crimson colour, with dark clouded upper petals. The texture is smooth, and the form appeared to be well retained.

In addition to the above, Mr. Beck showed Othello, Desdemona, and Sunset; the latter possesses light rosy-red lower petals, and deep red upper ones, with a good spot. It is a well-shaped flower. Mr. Blake exhibited a rose-coloured flower, named Mrs. Hanbury.

### *Bloomed in* 1845.

1st Prize, 1*l.*, Mr. E. Beck, for Competitor, a very smooth and even flower, and of superior shape; the petals appear, too, of good substance; very bright pink is the colour of the lower petals, and the upper ones are rich crimson maroon.

Extra Prize, Mr. E. Beck, for Caliph, bright purplish-rose lower petals, with nearly black upper ones, a clear and fine-shaped flower.

Besides the above, Mr. Golledge, of Stratford, exhibited Essex Pet; and Mr. Robinson, Kitty Fisher, Duchess de Nemours, and Refraction.

### CALCEOLARIAS.

1st Prize, 15s., Mr. Kinghorn, Twickenham, for Exemplar, described in p. 174 of our last Number.

Extra Prize, Mr. Garrod, gardener to G. Forman, Esq., for Lacerata, a bright yellow, chequered with deep crimson, and well shaped.

Extra Prize, Mr. N. Gaines, Battersea, for Climax, yellow, with crimson blotches and marblings.

Extra Prize, Mr. N. Gaines, for Louis Philippe, bright yellow, with crimson markings and streaky spots.

Besides the above, the following were shown:—By Mr. Kinghorn, Midas, Emily, Rosina, Symmetry, Miss Houston, yellow-crimson, chequered; and Hope, tawny-ground colour, chequered. Mr. Widnall, of Cambridge, had Picta superb. Mr. Ansell, of Camden Town, had Idas, Daniel O'Connell, yellow, sparingly chequered; Mrs. Ansell, Merry Monarch, Queen of Fairies, Fair Maid of Camden, cream colour, faintly chequered; Unique, Lady Platt, yellow, lightly chequered; Letitia, and Queen of Gypsies. Mr. Gaines had Picta, Tricolor, Delicata, cream colour, lightly chequered; Conspicua, Novelty, purplish rose, with dark-crimson chequered markings, novel; Brilliant, Perspicua, orange, with dark-crimson markings; Attraction, Flora, Florida, Vanguard, yellow, with streaky spots, and dotted margin; Isabella, and Elegans. Mr. Garrod had Garrodii, Orange Perfection, Leopold, and Claritos. Mr. Holder, of Eton College, had Beauty of Eton, rose colour, with dark-crimson blotch, novel. Mr. Harley had General Tom Thumb. Mr. Liddiard had Salthill Rival. Mr. Barnes had Constellation, Minerva, and Midas; and Mr. Henchman had Aurantia, Magdalena, Spotted Rival, and Annette.

### PANSIES.

No Prizes were awarded.

Messrs. Brown and Attwell exhibited Desirable, Queen of Beauties, Huntsman, Monarch, Tippo Saib, and Black Prince. Mr. Backhouse had a stand of a seedling, named Earl of Zetland. Mr. Turner had Dido. Mr. Burdett, of Hayes, had Magnet. Mr. Henbury, of Croydon, a dark flower, named Rajah. Mr. Bragg had Goliah. Mr. Collison, of Bath, had Mercury and Shiloh.

### CINERARIAS.

Extra Prize, Mr. Pearson, of Hampstead, for a tolerable flower, named Paragon.

In addition, Mr. Pearson showed Magnet, Duke of Cornwall, Pomona, Lady Milo, and Bridesmaid. Mr. Smith, of Pimlico, had Royal Standard, Louis Philippe, Sultana, Queen Mab, Hornsby, and Paragon. Mr. Bunney, of Stratford, had Atrocœrulea and Alba-cœrulea. Mr. Pamplin, of Lea-bridge, had Rotundiflora, Purpurascens, and Elegantissima.

### VERBENAS.

No Prizes given.

Mr. Pearson, of Hampstead, showed two—Avalanche, a pure white, and Defiance, rose crimson.

### AZALEAS.

No Prizes awarded.

Mr. Ivery, of Betchworth, produced Rosea elegans and Striata formosissima, the latter in the way of Gledstanesii, the former a good-formed pale rose variety. Mr. Gaines had Elegans nova, light rose colour, and Rosea superba.

### MISCELLANEOUS SEEDLINGS.

Extra Prizes to Mr. Bunney, of Stratford, for two prettily spotted light Rhododendrons, named Medora and Coronet. Mr. Bruce also showed a seedling, called Atropurpurea, with crimson purple flowers, having a blotch, distinct dark spots. A seedling Heath from Messrs. Lucombe, Pince, and Co., of Exeter, named Pinea major. Mr. Widnall showed a Cactus, called Magnifica; but it is not sufficiently distinct. Mr. Steadman showed a Gesneria, which he named Maculata; in size and colour it is similar to Cooperi, but has several spots at the throat.

In plants of a miscellaneous character we noticed,

Three plants of Schizanthus Grahami, from Mr. Piper. Six small plants of Erica depressa multiflora, from Messrs. Veitch. Five Ericas, Pinifolia, Thunbergia, Tortuliflora, Jasminiflora, and Florida compacta, from Messrs. Henderson. A basket of British Orchideæ, from Mr. Keiler, Eltham, Kent: this collection consisted of Orchis mascula, O. morio, O. fusca, and O. ustulata; Ophrys apifera and O. aranifera, Aceras anthropophora, Listera ovata, and Platauthera bifolia; an extra prize was given them. A collection of ten small plants of Proteacea, from Mr. Henchman, obtained an extra prize; they consisted of Banksia sphærocarpa, B. Brunonia, B. Hookerii, B. repens, B. prostrata, Diplophragma bipinnata, Dryandra Fraserii, D. tenuifolia, and two other species of Dryandra. J. Allnutt, Esq., sent Chorozema varium and C. Dicksonii, Erica ventricosa coccinea minor, and E. vent. carnea. From Mr. T. Moore was a pot of new and undescribed British grass, allied to Glyceria fluitans. From Mr. T. Banks, of New Kent road, was an extensive collection of dried Ferns and other British plants: extra prizes were awarded both to the Ferns and Phænogamous plants.

## ARTICLE III.

## ON SOWING THE SEEDS OF EXOTIC PLANTS, &c.

BY THE FOREMAN OF A LONDON NURSERY.

A CORRESPONDENT in the CABINET having recently asked for information on sowing exotic seeds, induces me to send the following particulars thereon. The method is the result of long and successful practice.

I premise the article by saying that it is necessary to be provided with a stock of soil of different sorts. Whatever mould is wanted for this purpose should be moderately dry, and finely sifted before used. The sifting should be performed with two sieves, one of which must be particularly fine, to procure surfacing and covering mould for the finer seeds.

The month of February is the most proper season for sowing these seeds, as they soon vegetate at this time, and make strong handsome plants by the latter end of the ensuing summer, which is an object of the first consideration in this business; for when sowed later, the greater part, and more especially the tenderer species, will be too weak to part into separate pots, and therefore are liable to suffer by damps and rottenness, during the winter following, by being left in the seed pots; and should they be attempted to be removed at this late season, which some will do sooner than suffer them to take their chance as they are, they seldom prove more fortunate. Whereas those sown about the latter end of January, or any time in the following month, will for the greater part be fit to pot separately in May or June, and therefore have the whole summer to establish themselves; and even such of them as are more slow will have at least sufficient strength and woodiness to withstand the casualties of winter, should they be left in the seed pots, much better than the soft herb-like produce of later sowings.

As an exception to the above rule, may be mentioned *Erica*, and such like seeds, which are at first slow of growth, and produce firm, woody, though perhaps small stems; these, from their nature, not being so liable to suffer from damp as gross, quick-growing articles, may be sown, with every prospect of success, in the autumn. Indeed, for heaths, I prefer a September sowing, towards the end of the month. If the seeds are good they soon vegetate, and will acquire sufficient strength to carry them through the winter; and being so small, they stand more detached; therefore they do not damp or rot each other: whereas, if they are sown in spring, they are not fit for potting off until it is too late in the autumn to attempt it, and consequently they are left for the winter in their seed pots, when, from their increased size, they will have become so close as to inevitably injure each other, perhaps even to the destruction of the whole crop. Those sown in the autumn are not of sufficient size to be potted off until July or August in the ensuing year.

The day being resolved on, let a quantity of the different sized pots be filled with the mould best suited to the nature of the seed to be sown. As on other similar occasions, it must be pressed down pretty tight to about half an inch below the rim of the pot, adding more if requisite. On this may be sown any of the coarse large seeds, which should in general be covered one-fourth or half an inch, according to their size; but if the seeds are small and curious kinds, such as heath, &c., a little more nicety is required. For these the pots must be surfaced with some very fine mould, in depth about a quarter of an inch, which will raise it to the same distance below the rim; on this, it being perfectly level and firm, let the seeds be sown neatly and even; then, with the same fine machine, sift a very light covering over them, and press it gently down with the hand. If the parcels of seed are small, two, three, or more kinds may be sown distinctly in the same pot, distinguishing each by a small painted stick, to be set perpendicular in the centre of the pot, with the name or number inscribed thereon.

The sowing being finished, give the pots a gentle watering with the rose of a water-pot, to be repeated three or four times, until the mould therein becomes sufficiently moist for vegetation; let them be then set in the most convenient, dry, airy part of the greenhouse, where they can be regularly attended as to watering and weeding. Watering they will require at least once a day, in a greater or less degree; for if they are not kept properly moist, the seeds will not by any means vegetate freely, if at all; however, the other extreme is to be studiously avoided. The weeds should be regularly pulled out before they attain any size, else, besides the top smothering the young seedlings which may have started, the roots, in getting them out afterwards, not only disturb them, but also the remaining seeds that may be perhaps on the point of bursting their embryo; by which means it not unfrequently happens, in places where this strict attention is not paid, that the greater part of the crop is thereby destroyed.

As the spring advances, it will be necessary to lay a few sheets of strong paper over the pots for two or three hours in the middle of the day, if the weather happens to be clear, and the sun acts forcibly on them, particularly those in which the finer seeds are sown, in order to prevent the surface getting over dry and powder-like; or, otherwise, if the mould happens to be pretty moist, it is liable to form a mossy crust, which might be particularly injurious, by preventing the young seedling ushering itself into the light, from penetrating through it with that ease which is requisite.

It is not advisable to keep these small kinds of seed too long unsown, therefore foreign seed should for the most part be sown as soon as received, on account of the length of time they are in general on their passage home; yet there are some, such as heath, and other firm, hard seeds, which will keep very well for a year or two, a part of which may generally be reserved for future sowings.

In this manner must they be managed until the beginning or middle of June, at which season the greenhouse will in general be found to be too drying a situation for them; they must therefore be removed, particularly the larger kinds of seed, to some shady border, where they can be plunged nearly up to the rim in coal ashes or sand, which will greatly assist to keep them in a proper moist state. Here all the care they will require is to be kept clear from weeds and regularly watered morning and evening, if requisite, but never when the sun shines strong upon them, lest the tender leaves of the young plants should get scorched; it will be also necessary to have a careful eye, daily, for slugs, worms, &c., otherwise they will be liable to suffer much from the depredations of these insects, particularly in the evenings. Should there be any fine light-covered seeds, such as heaths, &c., they must be set in such manner that they may be covered with a common hotbed frame, in a moderately exposed situation, so that, in case of sudden or heavy showers, which might otherwise wash the seeds out of the pots, they may be occasionally covered, to preserve them from such violence; yet they may be exposed to gentle rains at times, but never long together, lest they become over wet, which would soon perish them in this tender state. They will likewise require to be shaded with a mat in clear weather, or even a double mat in the very hottest season.

Early in July, many of them will be growing pretty fast, and will require to be potted off into separate pots, as it is much preferable to do this while they are young and small, before their roots become matted together, than it is afterwards; besides that they have a considerable portion of the growing season before them to establish themselves, before the winter stops their career.

In performing this work care should be taken to match the pot to the size of the plants, and nature of the species to be potted, as overpotting these seedlings might be of the worst consequence. The largest sized pots I would recommend for this use (unless the plants be particularly strong) are what are called small sixties, or halfpenny pots; but for heaths, and such like very small articles, a still less size is to be provided; these are known by the very appropriate name of thimble pots, on account of their diminutive size.

Being provided with a quantity of these, and the different sorts of mould properly prepared that may be requisite for the kinds to be done, proceed to part the plants, in doing which let the nicest care be taken to preserve as much roots and earth to each plant as can possibly be done without injuring the others. Let them be neatly potted in the proper mould, which must be gently pressed to the roots, that they may the sooner incorporate themselves with it. In this manner pot as many as may be thought sufficient for the present purpose, at the same time allowing a few for mischances. They must then be well watered, in the manner already directed for seedlings, and set in a cool frame, on coal ashes well rolled, or any other hard substance that will prevent the worms getting so freely into them as they otherwise would. The lights must be kept constantly on, and close, for a few days, more or less, as circumstances may require; and it will be also necessary to shade them very securely from the strong rays of the sun at first; however, in a little time, the lights may be taken off at night, if fine, having them on, and shading in the day, until by degrees the plants are so hardened as to be able to withstand the full power of the sun; thus, in the space of a fortnight or so, they will be fit to be set in the clumps along with the other plants.

This business should not be undertaken later than the middle of August, for if executed at a more advanced season the plants will not have time to establish themselves, and consequently will not succeed to the wishes of the proprietor; therefore, any that may remain in the pots, not strong enough to be parted by that period, should be removed into the greenhouse early in September, and there placed in their proper situation in that department until the spring following. Indeed, there are some seeds which absolutely require to be kept for that term before they will vegetate, whereby it becomes necessary to examine with care, when removing them to the greenhouse, whatever pots have not by that time shown any signs of vegetation, and those which are found alive must be saved, and treated in the same manner as fresh-sown seeds; those which have failed should be emptied, and taken to their place at once.

The pots set in the house will require nearly the same treatment as usual, viz., to be kept perfectly clear from weeds, and regularly watered. Water should now be given in the morning only, as any damps it may occasion will have time sufficient to evaporate in course of the ensuing day; whereas, if given in the evening, it causes a chillness about their tender leaves, and from the necessary closeness of the house at night, not having free exhalation, it may do a material injury, not only to the seedlings themselves, but likewise to the adjacent plants, by tending to increase the general damp of the house.

When first housed, if the weather prove clear, they must be shaded for two or three hours at mid-day; but this practice must not be followed too closely, as the influence of the sun is but seldom too powerful for them at this season, and during the winter months the more sun they receive the better: it is also necessary to be particular in observing that no slugs, snails, or any other insect, harbour about them, as before mentioned; otherwise, they may perhaps destroy all the hopes of the season in one night; which is to them, as well as to most other insects and animals of prey, a convenient time for their depredations.

By a careful attention to the above rules, adapting them as place, time, or circumstance will permit, one may expect in the ensuing spring to see their remaining seeds of last season's sowing begin to vegetate very fast; that is, such of them as still have the germ of life sound, which can at any time be easily ascertained. They will, when grown to a proper size, require to be parted, and potted separately, in the manner I have before directed; but, as it is there noticed, they must not be permitted to grow too large before this operation is performed, on account of the roots being liable to interweave with each other, and by that means render it more difficult to be well executed; besides, it may be injurious in another manner, by occasioning the plants unavoidably to harbour damps, slugs, &c., the evil tendency of which has been already, I presume, sufficiently explained.

There is one thing necessary to be remarked before I have done with this article, which is, that those seeds received from New South Wales, in general, as well as many others of the South Sea Islands, and also several, particularly of the larger sorts, from the interior parts of the Cape of Good Hope, from the warmer countries of America, and, in short, any of the climes in, or approaching the same latitudes, although the plants when grown will flourish and come to perfection in the greenhouse, yet the seeds will require the aid of a hotbed when first sown to set them in vegetation, and until they are parted and established in their separate pots, then to be hardened by degrees to the open air; from which time they may be treated as directed for the more hardy and common sorts of seedlings.

# ARTICLE IV.

## ON BUDDING THE ROSE.

BY W. W.

The most certain time to bud the rose is from the beginning to the end of August, the sap then being in full force, more especially so if the weather be moist after a droughty season; whether early or late in the month will be pointed out by the season being an early or late one. The desideratum in the plant is, that the bark will most easily separate from the wood, exhibiting at the inside a free supply of sap.

If the season be droughty the sap will not flow so freely, unless a good soaking of rain falls, or the stocks have a free watering a week previously to budding, and if this be repeated it will be an additional stimulus.

If it happens that there is a cloudy day to perform the operation of budding in, take advantage of it; if not, to bud towards the close of the afternoon will be the best part of a sunny day. I have budded ten kinds of roses upon one stock, all of which succeeded, and have bloomed most singularly beautiful. Care was taken to have those kinds which were of a similar habit in growth, for a vigorous growing kind and a weakly one are unsuited together; the former would by its luxuriant growth prevent the other from having due support, and eventually would, in a few years, perish.

In selecting a bud for insertion, choose a strong and healthy shoot; cut away that part which has pushed since June, and from it select a bud for the desired purpose. A plump one should be taken; that is, it should be full, round, quite closed (i. e. not pushed). Such a bud may generally be had about midway up the shoot, the lower ones being more dormant, and the upper ones scarcely perfected enough. The bud is situated in the axillæ of the leaf.

The shoot having been cut from the plant, take it in the left hand, holding the thickest part inwards; then with a very sharp knife, begin to enter the shoot about three quarters of an inch above the bud, cutting downwards about half way through the shoot, and bring out the knife about the same distance below the bud, in which case the bud is contained in the portion cut off, "which is termed a shield," and is formed as a segment of a circle. Then take the shield betwixt the finger and thumb, holding the bud downwards; that is, in a different form to that it had grown in; press the shield so as to be held firmly, then gently twist the upper end of the shield, "which is nearest you," and this will loosen the wood from the shield. The wood must be taken out with the right hand, whilst the shield is held by the left. The separation of the wood from the shield must always begin at the upper end as it had grown. It will then be necessary to see that no vacuum be in the inside of the bud; if there be, the root of it is gone, *and it will not grow;* though the bark might unite, no shoot could be produced. If there be no hollow inside the bud it is fit for use. If the shield does not separate freely from the wood the shoot might be soaked for an hour, and it would assist the shield and wood to separate more readily. The edges of the bark of the shield must be quite smooth and clean, on no account to be left jagged. The leaf, in the axilla of which is the bud, must have one half of it cut away, for the evaporation of the whole would much weaken the bud, and rather prevent its growth. The shield having been thus prepared, lay it in water till the incision is ready for its reception.

The side shoots must be left to bud upon; on the upper side of a shoot of the present year an incision must be made through the bark an inch and a half long; the lowest point of the incision to be about a quarter of an inch from the trunk of the stock; that is, from the origin of the shoot. At the upper point of the incision already made a cross cut must be made through the bark, as long as it will admit the shield readily under it. With the ivory end of the budding knife proceed to open the edges of the bark at the upper part of the incision, and very carefully proceed downwards; which, if the tree be in a proper state, will separate readily. This being done, slip in the shield, and carefully force it down, so that all the shield may be inclosed under the bark, excepting about the eighth of an inch of the upper part of it, which must be left outside, and that portion must be cut across, so as to make it fit to the inside of the cross cut in the incision, so that the bark of the shoot above the incision, and the bark of the upper part of the shield, may come in even and close contact; this is very necessary, because the first union takes place *there,* by the descending of the sap coming in contact with the top of the shield.

The bud being thus carefully inserted *must not* be removed from its position; immediately some wet bass matting must be bound tight round the stem, beginning at the bottom part of the incision, crossing the ligature front and back, and terminating above the cross cut. The bud and leaf must be left clear, but only just to peep out. Let the bass be secured at the top in a knot, and that to be at the opposite side of the shoot to the bud; in other words *behind it.* If the knot were made at the same side as the bud, it would hold wet, and be liable to damp off the bud in a rainy season. It is of advantage to shade the bud, which is easily done by taking a laurel leaf and forming it so, that by tying the ends together and cutting out a portion to fit it to the stock, it will form an arch over, and thus protect it from the injurious effects of wind, sun, or wet; all of which should be particularly guarded against for a time, in order to secure certain success.

If it be desirous to have the name retained of each kind of rose inserted, this must now be attended to by affixing a sheet lead, or other label thereto, by means of copper wire, with the name or number to signify it.

Persons who have not been accustomed to budding should previously experiment a little upon willow shoots, the bark of which easily moves, and affords facilities for such attempts.

If, after budding, the weather should be droughty, the stocks should have an occasional watering at the roots, which will greatly contribute towards success.

If a bud should fail, and it be discovered in time, such a shoot may be supplied by inserting another bud.

Buds may be very successfully inserted into the main trunk of a stock; one or more buds may be put into it; the bud is found to succeed best about half way up the stock; the younger the stock the better it will succeed.

If the operation of budding has been properly performed, and the stocks suitably supplied with wet, from rain or otherwise, in about a month from the time of budding, the bass ligature may be taken away, and one tied round in a looseish manner. This admits the bark to swell, whilst it prevents the edges from being drawn open.

If the weather should be droughty, the first placed ligatures must be kept too for six weeks, and, in case of continued drought, even till spring.

When the stocks have ceased growing, which will generally be the case by the end of October, the branches of the stock must be cut, in order to strengthen them, and make them neat.

In shortening them, leave about six inches of each above the bud which has been inserted.

If the ground round the roots be covered a few inches deep with some strawy manure, during winter, it will be of some service to do it.

No other attention is required till spring, excepting to have the stocks properly secured against winds.

I shall, therefore, have an article drawn up in time for the second season's management.

*Note.*—In preparing the bud it is unnecessary to remove the bit of wood attached to the bark. Omitting to do so saves trouble, prevents the bud from being damaged, and more than equally insures success.

## ARTICLE V.

### A FEW WORDS ON THE WEATHER.

BY ANAEL.

The science of meteorology is to no one of greater importance than to the gardener; I hope, therefore, a few words on the subject may not be deemed inapplicable to your pages; and as at the present day the attention of many able scientific men is attracted to its consideration, I hope the period is not far distant when they will be enabled to give us some rules, whereby we may discern forthcoming changes; this would indeed be a boon of no ordinary character.

The sources from whence indications of meteorological phenomena are derivable are various; even in the vegetable and animal creation many sensitive indications are afforded, which, doubtless, numerous of your readers have with myself observed. Philosophical instruments too have been invented and contrived purposely to foretel approaching variations in the atmosphere. The source, however, capable of producing those changes ought first to have our especial attention, and seeing then that the whole universe is but one connected series of bodies, all obeying the same laws, and each acting in concert with the rest, may we not believe that the laws of climate are as fixed and certain as are those of physical astronomy, and consequently that every change in the weather is the effect of some determinate cause? That this cause proceeds more or less from the influence of the heavenly bodies, by the rapidity of their motions, or by their essential and physical characters, is now acknowledged by many observers. I was first induced to take cognizance of this effect of the sun and planets over our atmosphere a-year or two ago, and I have repeatedly observed very decided changes take place near the time when these bodies arrived at such positions or angles capable of reflecting their rays to the greatest advantage; some observations upon which shall be the subject of another paper, for insertion in the Cabinet, and as the consideration involves a subject of so much interest to us all, I hope they may merit your approbation. The sole purport of my addressing you on this ocasion is to admonish my gardening friends to adopt such precautionary measures as are requisite to the protection of their tender plants from destruction, by a great increase of cold and *sharp frost*, which I venture to predict we shall have about the *First* of October next; and I invite particular attention to my prediction, as upon its verification I shall claim the indulgence of being allowed one of your pages in a future number for some further observations.

# PART II.

## LIST OF NEW AND RARE PLANTS.

**Achimenes argyrostigma.** Silvery-spotted. (Bot. Mag. 4175.) Gesneraceæ. Didynamia Angiospermia.—The collector sent out from the Royal Botanic Gardens at Kew, discovered this new species in New Grenada. The leaves are peculiarly beautiful, of a rich velvetty dark green, with a tinge of purple, spotted with white, very similar as in the silver-spotted Begonia. The flower-stems rise to about a foot high, having a spike of flowers about half the length. Each flower is about a quarter of an inch across, of a white-cream colour. The plant blooms during the whole of summer. It flourishes best by rearing it in a moist and hot stove, and when arrived at some vigour to remove it to a cooler place; thus treated, it continues in beauty a much longer period. It requires a general treatment similar to the other species previously in our collection.

**Begonia Martiana.** Von Martin's Elephant's Ear. (Pax. Mag. Bot.) Begoniaceæ, Monæcia Polyandria.—It is a perennial plant, having tuberous roots; the stems are beautifully striated and transparent, like the clearest balsam. The flowers are large, produced in racemous heads. Each flower is about two inches across, of a pretty rosy-crimson colour. It is in the collection of plants in the garden of R. G. Loraine, Esq., of Wallington Lodge. It is a stove plant, and well deserves a place in every one.

**Bolbophyllum umbellatum.** Umbel-flowered. (Bot. Reg. 44.) Orchidaceæ. Gynandria Monandria. It is a native of Nepal, and is in the collection at Chatsworth. The flowers are straw-coloured, spotted with purple. Each flower is about half an inch across.

Callipsyche eucrosioides. Two-coloured Fairy Bloom. (Bot. Reg. 45.) Amaryllidaceæ. Hexandria Monogynia. A native of the West Coast of Mexico. The flower-stem rises to about two and a-half feet high, terminating with a scape of ten flowers, of a scarlet red colour, about an inch long. It is in the collection at Spofforth.

Echinocactus myriostigma. Many-spotted. (Bot. Mag. 4177.) Cactaceæ. Icosandria Monogynia. A native of Mexico. One of the large-angled kinds, forming five or six deep furrows, and as many broad projecting angles; the whole surface covered with white scale-like dots. The flowers are produced at the top of the plant, each about an inch across, of a delicate straw colour.

Epidendrum radicans. The rooting. (Pax. Mag. Bot.) Orchidaceæ. Gynandria Monandria. Received into this country from Guatemala, and bloomed for the first time in the superb collection of Mrs. Lawrence, at Ealing Park, and, subsequently, in the collection of Mrs. Wray, at Oakfield, near Cheltenham; the plant growing in a wire basket, and completely covering it with its long stems, each crowned with a head of numerous flowers. It blooms from September to February. In its native situation it grows among long grass and dried leaves. Each flower is about an inch and a-half across, of a bright orange-scarlet. It is a very neat and beautiful species.

Selago distans. Loose-flowered. (Bot. Reg. 46.) Selaginaceæ. Didynamia Angiospermia. It is a very neat and pretty greenhouse plant, which begins to bloom early in the season, and continues long. The foliage is heath-like. The flowers are small white, and produced in loose spikes.

Tasmannia aromatica. The Aromatic. Magnoliaceæ. Polygamia Monœcia. (*Bot. Reg.* 43.) *Collected on the mountains of Van Diemen's Land by* Brown. It is a handsome, hardy, evergreen, greenhouse bush, with purple branches. It blooms freely in April; each blossom is about half an inch across, white; produced in a corymbous head, at the termination of the shoots. The entire plant is very aromatic.

Whitfieldia lateritia. Brick-coloured. (Pax. Mag. Bot.) Acanthaceæ. Didynamia Angiospermia. It was sent from Sierra Leone to the gardens at the Earl of Derby's, Knowsley Park, near Prescot. It has also bloomed in the Kew Collection. It is a low evergreen shrub, much branched. The flowers are produced in terminal racemes. Each flower is between campanulate and funnel-shape, about an inch and a-half long, and half as much across the mouth. The calyx is brick-red, and the corolla of an orange-red. It is a very interesting plant, and will be a valuable ornament to a stove collection.

Porphyrocoma lanceolata. Lance-leaved. (Bot. Mag. 4176.) ------ thaceæ. Didynamia Angiospermia. It is a hothouse plant of the sub-tribe Justicieæ. The leaves are five inches long, lance-shaped, drooping. The flowers are produced in very richly-coloured spikes, of a deep purple, violet, and red. It is a very fine showy hothouse plant, which blooms during the spring and summer months. It deserves a place in every one. It has bloomed in the gardens of the London Horticultural Society.

## New Plants seen in Nurseries.

Fedia grauliflora. A new and handsome annual received from Algiers. It has large heads of pink flowers, and blooms most of the summer. It is a very suitable plant for a bed, or for creeping over rock-work.

Calandrinia umbellata. Messrs. Veitch's,
this from Chili. The flow
[illegible]

Gardens.

**Statice (Novæ Species).** A new species, sent to this country by the collector of the London Horticultural Society; has bloomed in Mr. Glendinning's nursery at Chiswick. The flowers are white and yellow.

**Salpichroa glandulosa.** Messrs. Veitch's obtained it from Chili. It is a greenhouse shrub. The flowers are bell-shaped, large, of a greenish-yellow colour; very pretty.

**Physianthus auricomus.** A hothouse, twining, shrubby plant; blooming very similar to the Stephanotus floribundus, but of a pretty cream colour. It is in bloom in the nursery of Mr. Knight, King's Road, Chelsea.

# PART III.

## MISCELLANEOUS INTELLIGENCE.

### QUERIES.

**On Glycine Harrisonia, &c.**—An old Subscriber would be much obliged for some information on the culture of the Glycine Harrisonii (or Harrisoniana), which he has had in a border of his greenhouse for a year, without the plant making the smallest progress in growth, much less in coming to a flowering state.

Is it usual for the Erica mirabilis to push its young shoots through the faded flower?

[If the plant has not yet pushed, it would be best to withhold water from it; so that the soil is but barely kept moist. In this condition it must remain till the end of February; then take it up, plant it in a pot, and place it in a hot-bed frame, or plant-stove, which, most likely, will induce it to push. When the plant has commenced growing, then it may be planted out entire into the border. It flourishes best when there is a little bottom heat; in such a situation we have seen it grow twenty feet in one year, and bloom profusely. We never saw the Erica bloom in the manner described.—Conductor.]

**On Designs for Flower Stands in Rooms.**—As a reader of your Floricultural Cabinet, I shall feel obliged by your mentioning, in your next Number, where designs for flower-stands for rooms can be procured. A. B.

Barnstaple, near Devon.

[If informed where to send some plans, we will do so by post.—Conductor.]

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**On Hoveas.**—I have four kinds of greenhouse Hoveas, and I cannot grow or bloom them to satisfaction. How am I to proceed to be successful?

[Have a liberal drainage of broken pots, upon which some rough turfy peat, and plant in sandy heath mould, having some bits of pot or stone scattered indiscriminately among it. Keep the plants in a dry airy part of the greenhouse. In damp weather use but little water, but, in dry, water freely. They only require to be just kept from frost. To have the plants bushy, pinch off the leads to induce lateral shoots.—Conductor.]

### REMARKS.

**Brugmansia parviflora (or B. floribunda of some).**—Dr. Hooker informs us that this plant is the Juanulloa parasitica mentioned in Ruiz and Povon's Flora Peruviana, vol. ii. p. 47, fig. 185, which is a very different genus from the [illegible]. It is a parasitical plant, or, more properly, an epiphyte, and [illegible] of trees in Peru.

**Pelargoniums.**—When these [illegible] better, they push new lateral shoots, which become tolerably firm before winter, and thus form bushy plants for next year's blooming. The cuttings, too, *now* taken off can be struck before winter sets in. This early heading back-window plants is indispensable to having nice *bushy* plants for the next year; and where there are more than one of a kind, they can be generally spared.

CLERICUS.

ON AN INSECT INFESTING FRAME PLANTS.—In your June Cabinet, page 140, 1841, I promised to send you the result of my experiments respecting an insect. In reverting to that subject, I am sorry to inform you, that all my trouble has been of little avail, I have still the mortification of finding the insignificant looking, but destructive, insect, baffle every expedient that I could devise for its extermination; for the last two months I have been as much troubled with it as ever. With respect to the introduction, my opinion since I last wrote to you is altered, I am led to believe that this insect is indigenous to the common fern, (pteris aquilina,) which article we use bountifully for litter, and which no doubt is the cause of the annual visits of that minute tormentor. Perhaps some of your numerous readers that have suffered with the spot on balsams, cucumbers, and other frame-plants similar to myself, will be kind enough to examine the underside of the foliage with a microscope, and send you word whether they find any insects resembling those I mentioned, and whether they are any fern or not. The insect is not so readily found at this season of the year, as it is the early part of the summer, I sent some of the insects to a gentleman in London to beg the favour of the name, the following is the reply.—Mr. Thomas Webster's minute insects, which have infested his cucumbers and other frame-plants for three years, are some species of Ixodes, supposed to have been introduced with the fern which is used for litter. It might easily be mistaken for the red spider, but evidently does not belong to the same genus. As Ixodes ricinus attacks dogs, and yet is abundant amongst fern, it would be rather singular to find an animal so nearly allied, if not the same, abstracting its nourishment from plants.

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TO PROMOTE THE VEGETATION OF SEEDS.—If seeds be steeped in a solution of Sulphate of Ammonia, they not only come up more quickly but much more certainly. This I have tried in several instances, and it is valuable to persons obtaining seeds from distant countries. LUCY.

TO DESTROY THE THRIP.—Take a peck and a half of soot and put it into a hogshead of soft water, stirring it well with an old broom or batten every day, for ten days or a fortnight. Then strain off the water through a fine sieve or piece of canvas into another tub, on a peck of charcoal, and drop into it afterwards one or two lumps, or about three pounds of fresh lime; in about two days after strain it again, and it is then clear enough to syringe any plant or plants with it. It will not only extirpate the thrip, but also many other troublesome insects; it also induces the more vigorous growth and healthiness of the plants. Where it is practicable to dip the plant overhead in the liquid, it is best; and one or two such applications will prove an effectual remedy. When plants are in pots and too large to dip, lay them in a slanting direction for effectual syringing. This has been tried by several extensively practical men and fully realized expectations.—*Gardener's Journal.*

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ON GROWING MIGNONETTE IN POTS.—In reply to the wishes of a correspondent in a recent number of the CABINET, on the London florists' mode of growing Mignonette in pots, I beg to state that for first-blooming pots of it the seed is sown the last week in September; these bloom from March following; the 1st of February for plants to bloom from the middle of April; and at this latter period for plants to bloom from the beginning of July; in August, for plants to bloom from October through the winter. About twenty plants is enough to come up. The pots are well drained with crocks and rough soil, and then filled with good rich loam and leaf mould, on which the seed is sown. At an early stage the plants are thinned to one-half, and in a fortnight after to half again. The seed being sown, the pots are placed in a gentle hot-bed frame, kept close shaded, till the plants are up; then a proportionate increase of air is admitted, avoiding, at the season, cold wind. When hot sun occurs, a little shading is adopted. A lighter soil is used for the plants to grow in for winter blooming; the water more readily passes through, and the plants are not so liable to rot at that dull period. Water, too, is not applied over-head, but the foliage is kept as dry as possible.

The pots are plunged to the rim in cold frames during the warmer period of the year, and in winter where a *very slight* warmth is afforded. Thick reeded covers are used to protect in winter, and in severe weather a foot thick of dry straw under the reed covers. When the plants are about three inches high, a few slender twigs, or strips of wood, are fixed round the pot, and in the interior; a piece of matting is then secured round, and this repeated afterwards as required, so as to prevent the plants bowing down.

It is by this attention the fine vigorous pots of the London growers are produced, and at all periods of the year.

AN EXTENSIVE MIGNONETTE GROWER.

ON AN INSECT, OR WHATEVER IT IS, THAT DESTROYS THE INSIDE OF THE BUD OF THE CINERARIA.—I should feel much obliged to the Conductor to inform me, in the FLORICULTURAL CABINET, whether he has ever observed the destruction of the bud of the Cinerarias. The whole of the inside of the bud is destroyed just before the flowering, leaving the green cup perfect. All my plants have been attacked this winter, and they now begin to look sickly all over. I have placed them in three different places, namely, my greenhouse, with temperature about 40, in forcing pits, and in a room, but they are all affected alike, and I cannot find any insect, although I have searched well with a magnifying glass. I should be glad to be informed how to prevent it, for my disappointment has been very great this winter, as I had many healthy plants all ready for blooming early in January, and they have all gone off as I have described.

A VERY GREAT ADMIRER OF THE FLORICULTURAL CABINET.

[Our own Cinerarias have never so suffered, nor have we seen any elsewhere. Where ants infest plant-houses, we have observed them eat out the embryo blooms at a very early stage, especially those of the Fuchsia. If the plants of our Correspondent were placed during the earlier part of winter where they would be liable to be injured by ants, or other similar enemy, in the embryo stage, the flower buds might be destroyed; and on the removal of the plants as mentioned, and arriving at the more matured state, they would alike develope the injury when the calyx began to expand, whether placed in greenhouse, pit, or room.—CONDUCTOR.]

## FLORICULTURAL CALENDAR FOR SEPTEMBER.

*Annual Flower Seeds*, as Clarkia, Collinsia, Schizanthuses, Ten Week Stocks, &c., now sown in pots, and kept in a cool frame or greenhouse during winter, will be suitable for planting out in open borders next April. Such plants bloom early and fine, and their flowering season is generally closing when spring-sown plants are coming into bloom. Seeds of many kinds now sown in the open borders endure winter and bloom vigorously early next season.

*Camellias.*—Thin the flower buds, which will tend to preserve more certainly those for blooming, and cause them to be vigorous. Place some in the greenhouse early, that are desired to bloom in December, or before, in some cases.

*Carnation Layers* should immediately be potted off.

*China Rose Cuttings* now strike very freely; buds may still be put in successfully.

*Dahlias.*—Where the laterals are very numerous, they should be thinned out so as to have vigorous blooms. Towards the end of the month collect seeds of the early-blown flowers.

Greenhouse plants will generally require to be taken in by the end of the month. If allowed to remain out much longer, the foliage will often turn brown from the effect of cold air. The earlier succulents are the better.

*Lobelias.*—Offsets should be potted off, so as to have them well rooted before winter.

*Mignonette* may now be sown in pots, to bloom in winter.

*Pelargoniums*, cuttings of, may now be put off; plants of which will bloom in May.

If Pelargoniums have not been headed down, they should now be done, the shoots may push a little before repotting for winter. Plants which have been headed down, and have pushed shoots two inches long should be repotted.

*Pinks*, pipings of, if struck, may be taken off and planted in the situations intended for blooming in next season.

*Plants of Herbaceous Calceolarias* should now be divided, taking off offsets and planting them in small pots. Cut off the flower stems of such as have done blooming, to induce shoots to be vigorous.

Plants of Chinese Chrysanthemums should be repotted if necessary; for if done later, the blossom will be small. Use the richest soil. Pinch off the heads to cause the production of laterals, so as to have a head of flowers.

Plants of Pentstemons should be divided by taking off offsets, or increased by striking slips. They should be struck in heat.

*Pansies.*—The tops and slips of Pansies should now be cut off, and be inserted under a hand-glass, or where they can be shaded a little. They will root freely, and be good plants for next season.

*Polyanthus* and *Auricula* seed should be sown immediately, or otherwise be kept till spring.

*Ranunculus* beds should now be prepared as follows:—The depth of soil to be two feet and a half, of a rich clayey, friable loam, retentive of moisture; about six or eight inches from the surface to be a rich light loam, of a sandy nature. Remove the whole of the soil with the remains of the dung given last year, and turn up the subsoil a whole spade in depth, breaking it well. If the beds are allowed to remain in this state for a day or two to sweeten the subsoil, it will be an advantage. Then place upon the subsoil a layer of cow-dung, at least one year old, four inches thick; then scatter over it the fine powder of new-slaked lime, to correct any acidity and destroy the worms. Then fill up with new light soil, taken from the surface of the old tulip-bed or potato-ground, which has been frequently turned to sweeten it.

*Sweet William* seed now sown will soon strike and the plants bloom NEXT season.

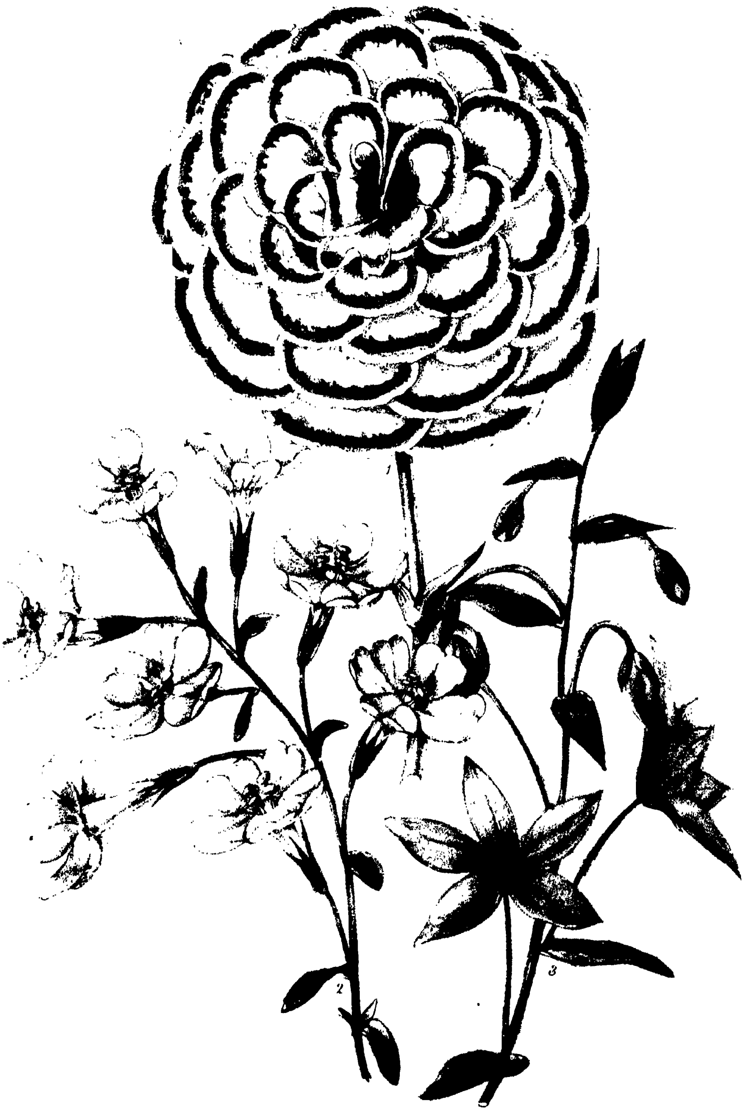
Seeds of many kinds of flowers will be ripe for gathering this month.

Tigridia, Commellina, and similar roots, may be taken up about the end of the month.

*Verbenas.*—Runners of this plant should now be taken off, planting them in small pots, half filled with potsherds, and the rest with good loamy soil, then placing them in a shady situation. It should be attended to as early in the month as convenient. When taken into a cold frame or greenhouse for winter protection, much of the success depends on being kept near the glass; or sink a box or two, half filled with potsherds, and the other good loamy soil, round the plant, so that the runners, being pegged down to the soil, will soon take root at the joints. When a sufficient number are rooted, separate the stems from the parent plant, and those in the boxes will be well established, and, being removed before frost, are easily preserved in winter, as done with those in pots.

When Lilies, Crown Imperials, Narcissuses, &c., require dividing, take them up now, and replant immediately; also plant Hyacinths and Crocuses, &c., either in beds or in pots for forcing.

When Petunias, Heliotropium, Salvias, Pelargoniums, (Geraniums), &c., that have been grown in open borders, and it is desirable to have bushy plants for the same purpose the next year, it is now the proper time to take off slips (select the short and well-ripened ones), and insert a number in a pot; afterwards place them in a hot-bed frame, or other situation having the command of heat. When struck root, they may be placed in a greenhouse or cool frame to preserve them from frost during winter. When divided and planted out the ensuing May in open borders of rich soil, the plants will be stocky, and bloom profusely.



1. TURNER'S MASTERPIECE, PINK. 2. CHAENOSTOMA POLYANTHA.
3. TREMANDRIA HUGELLII.

*Floricultural Cabinet.*

THE

FLORICULTURAL CABINET,

OCTOBER 1st, 1845.

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# PART I.

## EMBELLISHMENTS.

## ARTICLE I.

### TURNER'S MASTERPIECE, PINK.

This variety was raised by Mr. Turner, Florist, Chalvey, and was exhibited by him on the 2nd of July last at the Royal Botanic Society's exhibition, Regent's Park, and received a prize.

It is a very good flower, the white being pure, the lacing regular, and the petals, as will be seen by our figure, are not much serrated on the margin, and are well rounded, which latter are two of the most necessary qualities, and of which the generality of pinks are much defective in. We believe it will shortly be offered for sale, and the cultivator will find it well worth adding to his collection.

## ARTICLE II.

### ON THE CULTURE OF THE CYCLAMEN PERSICUM.

BY FLORA.

I do not remember ever to have met with (but perhaps you may attribute this to a very limited research) any specific directions for the treatment of that beautiful plant, the Cyclamen Persicum.

Being myself an admirer of this plant, not only on account of its general elegance of growth, but from its producing its flowers at a very early season, which thrive and retain their luxuriance even in the atmosphere of a room, I have turned my attention to its general culture.

The plan of treatment pursued by me, I have much pleasure in communicating.

The Cyclamen Persicum begins to show its flower early in the year, and may be said to be in beauty throughout the months of March and April. As soon as the flowers fade and droop, the pots containing the plants are placed on their sides, (as a precaution against their being watered,) in a corner of the greenhouse. In August, the roots are taken out of the pots, and the earth adhering to them being first carefully shaken off, they are planted in an open, but sheltered border of the garden, where they are allowed to remain until the cold forebodes frost; they are then taken up, the fibres being carefully preserved, and are put into pots proportioned to the size of each root; the crown of the plant is well covered with earth, and the compost used consists of two parts leaf-mould, one ditto sandy-peat, one ditto ashes of burnt vegetables, and a small portion of thoroughly rotted dung. The plants thus potted are then arranged in a cold frame, and plunged to the rim in coal ashes. In mild weather, the glass is taken off; but by night, protection from frost, and by day from cold and rough winds, is indispensable. On the flowers appearing, the plants are removed to the greenhouse, and are placed as near the windows as possible, to have the advantage both of sun and air; they are abundantly watered with soft water, of the same temperature as the atmosphere they are growing in, the leaves also are occasionally well sprinkled; but this operation is gone through in the morning, and the windows of the house are immediately opened, otherwise the leaves would damp off, and the root decay. The pots are well drained with pieces of brick.

In recommending this treatment in the culture of the Persian Cyclamen, I can speak with confidence, having, among other good specimens, one plant on which, a few days since, I numbered *eighty-seven* flowers.

The dividing the roots to increase the stock of plants is bad; the roots are a long time recovering the wound then given, and do not afterwards flower so strong. Young plants are obtained very easily from seed.

# ARTICLE III.

## THE METROPOLITAN FLORAL EXHIBITIONS.

### South London Floricultural Society, September 17.

This was the last show of this society for the season, and was held in the Surrey Zoological Gardens. Unfortunately the weather was very unpropitious, the showers descending frequent and most copiously; and the intervals of their cessation presented such a threatening appearance that only from amongst the more ardent devotees to Flora was the number of visitors comprised. The collections of plants, too, were not numerous, arising, doubtless, from the same cause; in those which were produced, however, some very good and well-blown specimens appeared, but as there was nothing very new amongst them, and it being our intention to be very brief in these remarks this month, we need not particularize the kinds. Amongst specimen plants one or two were very fine; we will mention Erica Irbyana, three feet and a half high, by as much in diameter at the base, forming a cone, and abundantly in bloom. Wistenia corymbosa was shown by Mr. J. Bruce, of Merton, bearing a multitude of its lovely azure-coloured blossoms, and was three feet high by three feet across. A number of fine plants of Lisianthus Russellianus was exhibited by Mr. James Cuthill, of Camberwell, each growing to the height of near four feet, and freely adorned with their superb purple blossoms. The branches of the plants, to the number of eight or ten, were spread out to the sides of the pots, and trained to sticks placed around its margin; and the luxuriant appearance of all the plants testified to their judicious treatment, for which Mr. Cuthill has become so renowned.

Collections of Fuchsias were shown in well-made selections, and in good condition; one of the best and newest was a seedling named British Queen, having a deep salmon-coloured tube and sepals, with a bright dark crimson corolla.

Two large stands of cut roses was displayed, which were very good, especially at so late a period of the season, and merited the general admiration they elicited. Messrs. Lane and Son, of Birkhampstead, obtained the first prize; in whose collection we observed fine blooms of La Biche, Infidelite de Lisette, Malibran, Augustine Marget, Hon.

Levison Gower, Strombio, Souvenir de Malmaison, William Jesse, Robin Hood, Devoniensis, Moire, and the beautibul yellow Chromatella. The second prize was awarded to Messrs. Paul and Son, of Cheshunt.

Dahlias were of course the chief feature of the exhibition, and their display was very good. The first prize, a gold medal, for twenty-four blooms open to amateur competitors only, was obtained by Mr. J. S. Proctor, sen., for the following kinds, viz.:—Antagonist (Bragg), Perpetual Grand (Brown), Queen of Roses (Widnall), Pickwick (Cormack), Nonpariel (Proctor), Consolation (Widnall), Beauty of Sussex (Mitchell), Indispensable (Girling), Favourite (Dod), Vivid (Thompson), Mrs. Shelley (Mitchell), Standard of Perfection (Keynes), Beeswing (Drummond), Essex Triumph (Turville), Raphael (Brown), Lady St. Maur (Brown), Unique (Ansell), Lord Howden (Harrison), Victory of Sussex (Stanford), Competitor (Hodge), Admiral Stopford (Trentfield), Eclipse (Catleugh), Sir R. Sale (Smith), and Blue Bonnet (Brown). The second prize was given to Mr. Cook; the third to Mr. Trentfield; the fourth to Mr. Legg; and the fifth to J. Edwards, Esq. Besides these were four other competitors.

In the amateurs collection of twelve blooms, the first prize, of a silver medal, was awarded to H. W. Collison, esq., of Bath, for some superb blooms of the following, viz.:—Lady St. Maur (Brown), Aurantia (Sparry), Nonpariel (Proctor), Blue Bonnet (Brown), Princess Royal (Hudson), Victory of Sussex (Stanford), Essex Champion (Turville), Eximia (Girling), Beeswing (Drummond), Cleopatra (Attwell), Gloria Mundi (Headley), and an excellently grown bloom of Northern Beauty (Robinson). Mr. Cousins received the second prize, Mr. Wick third, Mr. Hatchman fourth, and Mr. Wildman fifth; in addition to these there were sixteen other competitors.

In the nurserymen's class of twenty-four blooms, Mr. Turner, of Chalvey, was deservedly awarded the gold medal for the best collection, comprising superb blooms of the following kinds, viz.:—Perpetual Grand (Brown); Princess Royal (Hudson), a fine specimen, and got well up in the centre; Victory of Sussex (Stanford), large; La Grand Bauduin (Low); Alice Hawthorn (Drummond); Beeswing (Drummond); Competitor (Hodge); Admiral Stopford (Trentfield); Indispensable (Girling), fine; Beauty of the Plain

(Sporry), a magnificent bloom; Springfield Rival (Inwood); Aurantia (Sporry); Gloria Mundi (Headley); President of the West (Whale); Cleopatra (Attwell); Raphael (Brown); Ophir (Edward); Standard of Perfection (Keynes); Essex Triumph (Turville), a beautifully shaded bloom; Mrs. Shelley (Mitchell); Bermondsey Bee (Proctor); Mrs. James Richardson (Edward); Pickwick, (Cormack); and Nonpareil (Proctor). Mr. Widnall, of Granchester, obtained the second prize; Mr. Brown, of Slough, third; and Mr. Girling, of Stowmarket, fourth: there were also five other exhibitors. A prominent fault with many of the stands was, that they contained such a number of low and imperfect centered flowers. We regret the prevailing appearance of this imperfection because it is a great one, and exhibitors, in selecting the blooms for their stands, ought always to give especial consideration to the importance of a good centre, as from it, all the arrangements of the flower proceeds, and unless it is sufficiently elevated above all other parts, such flower is bad in the first point, and however regular its disposition may otherwise be, it is not fit for show.

In the seedling class a number of candidates were presented for approbation. Of those raised in 1844, which are to be offered for sale in the ensuing season, the following were selected for first-class prizes by the judges, viz.:—

*Sir Edmund Antrobus.*—Mr. Keynes, Salisbury: a flower of medium size and of a deep rich red colour; the flower is full, the petals being rather small, but very symmetrically arranged; outline, perfect; centre, somewhat too flat.

*Not named.*—Mr. Gaines, Battersea: white laced with deep purple, but fading to the outside; a good shaped flower, with the centre tolerably high.

*Queen of Perpetuals.*—Mr. Girling, Stowmarket: deep pencilled silvery lilac; and, although in one or two of the flowers there was a thinness around the eye, we have no doubt it is a very desirable flower.

*Lady Stopford.*—Mr. Trentfield: crimson-red colour; not above medium size; well and regularly cupped; outline perfect; centre not well up.

*Newington Rival.*—Mr. Smith: deep crimson; the arrangement pretty good, but the flower appears to want depth.

*Prometheus.*—Mr. Smith; crimson; rather thin of petals, and no improvement upon similar flowers already out.

In addition to the above, there were shown, not for prizes,—

*Marchioness of Cornwallis.*—Mr. Whale, Elcot: white, tolerably pure, but from the appearance we apprehend it inclines to blush unless bloomed in shade; the flower is full and the petals very regularly disposed; the centre rather flat. A good and true white flower is greatly wanted, and this we think is the best yet produced, though one or two of the blooms presented an uncertain appearance in the eye, after the way of Antagonist.

*Marquis of Aylesbury.*—Mr. Sparry, Denford: distinct lively purple; well cupped, fine smooth petals and regularly arranged; the outline complete, and in size rather above the medium; centre, tolerably good. This flower is also a seedling raised by Mr. Whale, and purchased of him by Mr. Sparry.

*Miss Prettyman.*—Mr. Turner, of Chalvey: blush, tinged white, the underside of the petals tipped with light purple, which gives a darker appearance around the centre as the petals are unfolding; only one bloom was shown, which was well up in the centre and of a good size; the details too were well disposed, and the circle good.

*Mrs. Caudle.*—Mr. Turner: novel nankeen-orange colour; the petals are very regularly arranged and well rounded, though by being rather over much folded around the centre, they there present too angular an appearance; the centre is well up and the flower will be generally liked; we do not expect, however, that Turner's Mrs. Caudle will become so celebrated as Mr. Jerrold's lady of the same name.

*Vanguard.*—Mr. Turner: light crimson, shaded down the centre of each petal with a darker colour; the shape is after Pickwick, but it has a broader and better petal.

*Magician.*—Mr. Turner: light salmon-red colour; good petal, and well arranged, but is deficient in depth.

In the seedlings of this year we saw nothing particularly good; the judges however awarded a first-class prize to H. W. Collison, Esq., for Andromeda, a pale ochre-coloured flower having a purple tinge at the margin of the petals; around the eye the petals appear too much quilled, and on that account we do not like it. A certificate of merit was awarded to Mr. Brown for a bright rosy coloured flower; very full, but the petals are too small and not around enough. Another certificate of merit was given to Mr. Bushell for a rosy lilac-coloured flower, deeper on the under side; and which in shape appeared much better and more promising than the other two.

Several stands of Heartsease and Verbenas were shown, and other miscellaneous plants which our space forbids us to enumerate,

## ARTICLE IV.

### ON THE PROPAGATION OF PELARGONIUMS.

BY A LONDON GROWER, AND A SUCCESSFUL EXHIBITOR.

Observing a Subscriber requests information on the best method of increasing what is usually called Geraniums, I forward the following particulars of the method I pursue in raising at least ten thousand each season:—

Early in June I take a sufficient quantity of cuttings of the different varieties, and after carefully preparing them, by taking off the lower leaf, and cutting horizontally through the stem just below a joint, I insert each sort separate, in pots previously filled with a mixture of three parts sharp sand, and one part sandy loam, using plenty of drainage at the bottom. After the cuttings are all put in, I give a good watering, and then remove them to a moderate hot-bed, and plunge the pots to the rim; I keep the lights shut close, except in the morning, when I admit a little air, and with due attention to shading and watering, I find them to be well rooted in about a month. Those kinds in which we abound I prepare cuttings as above described, and prick them out in a bed of finely sifted soil, in a warm situation in the open air. By shading them for a short time they soon strike root. When this is perceived to be the case, I pot them singly into small 60's, shifting at the same time those that were inserted in the small pots. In potting I use a compost of equal parts of sandy loam, peat, and well decomposed manure, adding about one eighth part of sand; when potted I place them in a frame, where the lights are put on in the day time, in order to throw a mat over them to shade the young plants from the sun; the lights are taken off in the evening, and the plants supplied with water, until they have struck fresh root, when this is found to be the case, the lights are removed altogether, and the plants duly supplied with water.

they remain in this state till the middle of August, when I carefully examine them, and shift those which have made sufficient roots into one size larger pots, being careful in this, as in all other shiftings, to use a sufficient quantity of drainage to carry off the superfluous moisture. Those plants not sufficiently rooted by that period, I defer shifting till the spring, as they succeed better when shifted at that time. After thus looking over all the plants, they are replaced in the frame, and treated the same as before, with this exception, that the lights are put on at night, and during heavy showers. About the first week in October they are removed to the greenhouse, where they receive all the air that can be admitted with a regular, but moderate supply of water. Fire heat is not used except to repel frost, or the dry damps arising from watering or other causes; to avoid damps in a measure I find it best to water in the morning, so that the air admitted during the day assists to carry off the superabundant moisure. The surface soil in the pot is frequently stirred, and occasionally some of the old removed and renewed; all decayed leaves are removed, both on account of the well-being of the plants, and to preserve neatness and order.

*Potting.*—The time of performing this operation is partly regulated by the state of the plants; those that were shifted in August, do not require shifting again till the middle of February, and again early in April, whilst those that were not shifted in the autumn require their first shift in February. In each successive shift I use one size larger, taking care to put plenty of drainage into the bottom, and to press the soil firm in the pots. I find the following compost to answer well:—two barrowsfull of light hazel loam, (from the surface of a rich pasture, which should be collected at least a twelvemonth before it is used,) one and a half barrowful of well rotted hot-bed manure, one barrowful of turfy peat, half a barrowful of pigeon's dung, two or three years old, and a quarter barrowful of sand, the whole being mixed in the autumn, and put under an open shed. In using it I do not sift it, but it is chopped fine with a spade. As the spring advances I allow a more copious supply of water, and I find that by using liquid manure once a week after they begin to grow, the plants are greatly strengthened, and the size of the flowers increased. When the flowers begin to expand, I shade them from the sun, by rolling a canvas over the roof of the house, which contributes to heighten the colours, and they remain much longer in bloom. The plants are placed on stages, which are constructed so that the surface of the plants are not more than five feet from the glass, and a free admission of air being admitted at the sides of the double-roofed houses, as well as at the roof, the plants are stiff and robust. Attention is paid to placing the plants at a greater distance from each other, as they advance in growth, and thinning away the shoots so as to leave them regularly placed and properly tied to sticks so as to splay around and form compact heads.

In June the plants are removed from the greenhouses to an appropriate situation in the open air, where they receive the full influence of the sun till eleven o'clock, and by attention to watering, many of them continue to bloom through the summer. Early in September, the plants are cut down to within a few inches of the pots; and they flower well the second year.

## ARTICLE V.

## OBSERVATIONS ON THE PLEASURE GARDEN.

BY A COUNTRY CURATE, NORTHAMPTONSHIRE.

I HAVE read with much interest several communications which have been inserted in recent numbers of the CABINET, on forming the outlines of plantations, clumps, walks, &c., in the pleasure garden, and having lately met with the following remarks on a similar subject, I was so pleased with them that I transcribed the entire, in order to have them recorded in your magazine:—

"The pleasure garden seems to own its creation to the idea that our sublime poet formed of Eden. It originated in England, and is as peculiar to the British nation as landscape planting. Whilst other arts have been derived from ancient, or borrowed from modern inventions, this has indisputably sprung from the genius of our soil, and is perhaps one of the most delightful as well as most beneficial of all that claim the name of elegant.

"Ornamental plantations are now so universally spread over the face of this country, that our island may be compared to a vase emerging from the ocean, into which the Sylvans of every region have set their favourite plants, and the Flora of every climate poured her choicest gifts, for the embellishment of the spot round which Neptune throws his fostering arms. Our ambition leads us to hope that we may add pleasure to the pleasure-ground, by pointing out the beauties of the shrubbery, which must render vegetation an object of admiration and veneration to all classes. I wish to attract attention to the peculiar pleasing properties of each plant, by the remarks of the ingenious, the anecdotes of the ancients, the harmony of the poets, the observations of the physicians, and the reflection of the moralists of all ages. Morality, however, of a gloomy cast, will be avoided; for my wish is to give the work, like the subject, a smiling aspect.

"Though flowering shrubs seem to contribute nothing to pottage, and little to medicine in its present refined state, yet they add greatly to our pleasure, and considerably to our health.

"They win us to good humour by their fragrance and cheerful appearance, and produce a serenity of mind by the calm reflections they present to it; thus relieving some of the maladies of the soul, as drugs mitigate the grosser and more perceptible sufferings of the body.

"'The spleen is seldom felt where Flora reigns;
The low'ring eye, the petulance, the frown,
And sullen sadness, that o'ershade, distort,
And mar the face of beauty, when no cause
For such immeasurable woe appears;
These Flora banishes, and gives the fair
Sweet smiles and bloom, less transient than her own.'—COWPER.

"I shall notice the allegorical allusions which the eastern nations are accustomed to make by means of flowers, and the fables of the ancient poets and mythologists respecting plants. Thus pleasing ideas may be connected with pleasing objects, and agreeable images convey lively but moral sentiments to the mind, adding to the charms of the country without recourse to romance or useless fiction. These accustom the mind to such violent sensations, that at last it is obliged to resort to an excess of feeling, either of mirth or grief, to prevent that dreaded fashionable lethargy of spirit—*ennui.* Such a habit in the end injures health, and consequently shortens life; but a calm and cheerful mind assists in the prolongation and enjoyment of both.

"'Come, then, ye blissful scenes, ye soft retreats!
Where life flows pure, the heart more calmly beats.'—DELILLE.

"It would seem that the more terrible a sight, and the more violent an impression, the more agreeable to the great portion of mankind, who run with avidity after objects of horror, whilst they pass unnoticed those which produce gentle and agreeable sensations; and would, to all appearance, rather tremble at the awful thunderbolt of Jupiter than calmly admire the beauteous horn of plenty. It has been observed that the volcano near Naples attracts more travellers to the city than the delicious gardens which adorn the shores of that region. The plains of Greece, overspread with ruins, would entice many to undertake a voyage to a distant country who would feel but little inclined to travel over their native soil to view its richly-cultivated lawns; and there is no doubt but that, formerly, where one person went to Egypt, to be a witness of Nature's bounty to that nation, five hundred became travellers to behold pyramids. A temple, after its fall, excites more eager curiosity than it did during its construction; and many, who will not cross their thresholds to look at a beautiful calm in nature, will rush to get a sight of a storm and shipwreck in a playhouse. This love of the terrific is not, as has been asserted by foreigners, peculiar to the English nation; it is prevalent everywhere. The author observed an instance of it when in Paris, in the summer of 1822. Wishing to visit the celebrated garden of M. Bourseau, unequalled for the beauty of its plants by any city garden in Europe, he received, in answer to all inquiries for direction to the spot, the usual careless, but short and decisive, *Je ne le connois pas, monsieur;* but, on asking the way to *La Mort,* every turn and alley were readily pointed out with all the bustle and officiousness of French politeness.

"In this history of flowering trees and shrubs there is nothing terrible to present to the reader; but every endeavour has been used to

"'Show nature's form in smiling beauty drest,
And call mankind to view her, and be blest.'—DELILLE.

"It seems hardly possible for any mind to be so debased as to be insensible to the effects of nature, whose vegetable charms become more endeared to us as our age and reflection increase. A more delightful cabinet of natural history can scarcely be formed than the shrubbery affords, even when unadorned with exotic beauties. It offers matter for contemplation of the most agreeable kind, which varies still as seasons revolve; and, as every tree and shrub has its peculiar inhabitants, we have at the same time a collection of animal and vegetable wonders that are sufficient to occupy all the leisure which our economical duties allow us. As years increase, a taste for most pleasures in general diminishes; those of the court become fatiguing; the charms of the table appear to lessen; and, as passion subsides and love languishes, the gay ball and splendid opera lose their delights; but the fondness for a garden increases, and is almost the only earthly pleasure that does increase. Let us not, then, neglect to cultivate a taste for what will form the delight and amusement of the latter period of life. Every tree we plant adds to the entertainment we prepare for future years, for ourselves, our friends, and successors.

"Should particular times and circumstances require a retrenchment to be made in domestic expenses, it should not begin with the garden. This, once neglected or laid aside, cannot soon or with small cost be re-established. There are other more expensive and less profitable indulgences which may be lessened without injury, nay, perhaps with benefit to an establishment. By giving one entertainment less each season in London, more might be saved than by ruining a whole pleasure ground, the only means of subsistence to a few labourers, whose consequent discharge exposes them to want and all the evils that accompany it.

"The introduction of a useful or an ornamental plant into our island is justly considered as one of the most important services that a person can render his country; for it is impossible to calculate on the benefits that may be derived through this means, when the qualities of the vegetable are ascertained and its virtues known. Even what is introduced and planted merely from curiosity or ornament seems to unite us to the nations from whence it comes. It bestows on us a share of the blessings of other climates, and affords us a portion of the smiles of a more genial sun. When, therefore, we dwell on the beauty of exotic trees and shrubs, we wish to be understood as expressing our gratitude to those who have enriched our land with additional charms, and more fully displayed nature to our eyes, and not as disregarding the plants that are indigenous to our soil. I am aware that many an Englishman has sighed under the shade of the banana for a sight of his native banks, where the primrose sparkles through the hazel hedge, and the violet peeps so modestly. The plants of our country recall the idea of it in the most forcible manner, wherever we meet them. They are often the first object that attract the attention of those who have been long absent from their native fields, and who, on their return, pour out the genuine effusions of joy on beholding the village elm, the well-known oak, or the unchanged yew, whose antiquity is equal to the church it shades. We are told of a young Indian Pontaveri (from Otaheite), who, in the midst of the splendour of Paris, regretting the simple beauty of his native island, sprang forward at the unexpected sight of a banana tree in the Jardin des Plantes, embraced it, while his eyes were bathed in tears, and exclaiming with a voice of joy, 'Ah! tree of my country!' seemed, by a delightful illusion of sensibility, to imagine himself for a moment transported to the land which gave him birth.

"We seem, as it were, for an instant to go back to the delights of infancy, when, on each succeeding spring, we visit the meadows covered with cowslips, which afforded us so many happy hours in childhood, as we formed balls of their blossoms. Then the playful girl, bedecked with wreaths and necklaces of daisies, led her little swain in chains formed of the milky flower stalks of the dandelion; but who at the sight of a butterfly burst the brittle bonds and scampered away, to return, perhaps, a few years after sighing, in fetters not so visible, but more binding.

There is no part of nature's works more interesting than flowers. They seem intended for the embellishment of the fair, and for the ornament of the spot where they tread. Their sweet perfumes have such influence over all our sensations, that in the midst of flowering shrubs the most acute grief generally gives way to sweetest melancholy. When our home and domestic companions are encompassed by the shrubbery, our situation approaches nearest to a terrestrial paradise. Is it not, then,

"'Strange, there should be found,
Who, self-imprisoned in their proud saloons,
Renounce the odours of the open field,
For the unscented fictions of the loom;
Who, satisfied only with pencilled scenes,
Prefer, to the performance of a God,
Th' inferior wonders of an artist's hand?
Lovely, indeed, the mimic works of art,
But Nature's works far lovelier.'—COWPER.

"The shrubbery is to a rational mind a source of inexhaustible delight and instruction, where each season brings new joy, and every morning a fresh harvest of delightful sweets. Subjects for new thoughts and contemplations present themselves to our view, and even the most dreary months still supply cause of admiration, and discover a world full of wonders; for,

" 'E'en Winter oft has seen it gay,
With fretted frost-work spangled o'er,
While pendants drooped from every spray,
And crimson bodlets told, once more
That spring would all its charms restore.'

"It is not to old age alone that the garden offers its placid delights. Every stage of life, from the cradle to the grave, is attracted by its charms. The infant is ready to spring from its nurse's arms, allured by the gay colours which flowers exhibit.

"They form the most innocent toy of childhood, and the cultivation of them is generally its first labour, whilst their presentation often explains the passion of youth. The happy belle loves to entwine them in her locks, and the fond parents delight to see their child mimic their beauties with the pencil;

" 'The flowers that grace their native beds,
Awhile put forth their blushing heads;
But ere the close of parting day,
They wither, shrink, and die away;
But these, which mimic skill hath made,
Nor scorched by suns, nor killed by shade,
Shall blush with less unconstant hue,
Which art at pleasure can renew.'

"The representation of flowers is the proper style of drawing for the softer sex. In this attempt they will succeed, and by this study will afford us delight, which they cannot do 'when o'erstepping the modesty of nature,' and the limits of their proper employment, they present us with specimens of their proficiency in the science of anatomy. A pursuit like this is often too bold, and the subjects sometimes too masculine to suit the feelings of the other sex. But flowers are the peculiar province of the fair, and the nearer their imitation approaches to nature, the more it delights us; which paintings of murders, massacres, deaths, and agony, certainly cannot. The beauty and grace that may be displayed in grouping flowers, united with the gaiety of their colours and the harmony of their tints, are well worthy the attention of those who were born to render life delightful. The neatness, nicety, and patience required in finishing flower-pieces, seem to demand the delicate hand of a female artist.

" The description, by Moses, of the garden of Eden, the first abode of first created man, formed the outlines which Milton has so splendidly enriched with all the imagery of poetry. From this have been copied the plantation, the park, and shrubbery, so justly the pride of the nation, and so properly the abode of its beauty. The Greeks devoted their terrestrial groves, as well as their celestial gardens, to the gods; but the Mahometans reserved their flowery lawns and umbrageous bowers for scenes of future bliss to mortal believers. We, however, more prudent, should wish to collect all such blessings, which bounteous nature has scattered over the globe, and in this present life form a modern garden worthy of the Hesperides, and deserving of, though not requiring, a dragon to guard it.

" Some of the pleasure gardens of antiquity were created for and devoted to the pleasure of the softer sex. Solomon has celebrated those of Jerusalem in song, and the extraordinary gardens of Babylon appear to have been formed by Nebuchadnezzar for his Median queen, who, we are told, could not become reconciled to the flat and naked appearance of the provinces of Babylon; but frequently regretted each rising hill and scattered forest which she had formerly delighted in, with all the charms they had presented to her youthful imagination. The king to gratify his consort, within the precincts of the city raised terraces and planted woods, in imitation of those that diversified the face of his queen's native country. Thus we are told originated those gardens, which, for their singularity and comparative extent, were considered one of the wonders of the world. Their base covered four acres of land, and the height of them was so considerable that they resembled a pyramidal mountain covered by a forest. The upper area, which was about thirty feet square, was about 300 feet distant from the river Euphrates, that washed the base of that stupendous superstructure.

" This towering pleasure ground overlooked the whole city and surrounding country as far as the eye could reach. Each terrace was covered with earth and planted with trees, so as to form a series of ascending groves; and every platform supported rural seats, fountains, and sumptuous banqueting rooms, on which all the splendour and luxury of eastern magnificence were lavished."

## REVIEW.

*Donn's Hortus Cantabrigensis; or, an Accented Catalogue of Indigenous and Exotic Plants, cultivated in the Cambridge Botanic Garden, by the late James Donn, Curator, Fellow of the Linnean and Horticultural Societies. With the additions and improvements of the successive editors: F. Pursh, J. Lindley, Ph. D., and the late G. Sinclair, F.L.S., F.H.S. The Thirteenth Edition, further enlarged, improved, and brought down to the present time, by P. N. Donn.* London; Longman and Co., 1845.

We hail with pleasure the appearance of an extended and much improved edition of this very useful book. As a general plant catalogue it is the easiest of reference of any other we have seen. It contains the description of nearly every essential on each plant: as natural order, Linnean class and order, generic, specific, and English name; native country, time of introduction, period of flowering, colour of flowers, whether stove, greenhouse, or hardy plant; perennial, biennial, or annual; tree, shrub, or herbaceous; evergreen or deciduous; height of growth; reference to figures in magazines, &c., &c. In one or two plant catalogues by other authors, the derivation of the generic name, soil most suitable, and in what situation in its native habitat it was discovered, are given. The first and second is worth adding to another edition of Donn's, the latter is not worthy of being recorded. There are a few inaccuracies in spelling the names, &c. We cordially recommend the work, assured it will be found a very satisfactory one.

# PART II.

## LIST OF NEW AND RARE PLANTS.

**Anigozanthus pulcherrimus. Beautiful Yellow.** (Bot. Mag. 4180.) Hemodoraceæ. Hexandria Monogynia. A native of the Swan River Colony, where it was discovered by Mr. James Drummond. Plants have been raised from seed by Mr. Low, of the Clapton Nursery. The plant grows from two to three feet high. The flowers are produced in a large branching panicle, of a rich yellow colour. It is a very interesting and showy green-house plant; well meriting a situation therein.

**Chirita Zeylanica. Ceylon Chirita.** (Bot. Mag. 4182.) Cyrtandraceæ. Didynamia Angiospermia. A native of Ceylon, and was raised by Mr. Henderson, gardener to Earl Fitzwilliam, at Wentworth House, from seeds he had received. Treated as a stove-plant, it blooms through most of the summer months. It will do well, too, in a warm green-house. It grows from a foot to half a yard high, slightly branched. The flowers are produced in a branching panicle. Each blossom is funnel-shaped, bellying underneath; something in the way of a small flower of Gloxinia speciosa. The flower is about an inch and a half long, and nearly an inch across the mouth, of a rich purple; being paler and reddish in the tubular portion. It strikes readily from cuttings, soon blossoms, and, so very beautiful, as to deserve a place in every exotic collection of plants.

Gardenia Stanleyana. Lord Derby's Gardenia. (Bot. Reg. 47.) Cinchonaceæ. Pentandria Monogynia. A native of Sierra Leone, sent by Mr. Whitfield to the Earl of Derby's, in whose service he was when the present plant was discovered. It has bloomed in the Royal Botanic Garden at Kew. It is a shrubby stove-plant; the foliage a lively green; ovate. The flowers are produced in great abundance, rising in an erect position above the foliage; each having a tube about nine inches long; and then terminates in a spreading five-parted flower, five inches across. The inside of the tubular portion is dark coloured. The centre of each spreading limb of the flower is green, spotted with red; the remainder is a snowy white, spotted with pink. The large spotted trumpet-like flowers, in profusion, produce a splendid appearance; they are fragrant too. The plant is of very easy culture. It deserves a place in every hothouse. From its vigorous habit it appears to us to be very likely to succeed well in a warm green-house. We are trying it; and, so far, it thrives well.

Chlorœa virescens. Green Veined. Orchidaceæ. Gynandria Monandria. (Bot. Reg. 49.) A native of the pastures of the Cordilleras of Chili, and, being a terrestrial Orchideæ, grows there as plenteous as our meadow orchises do in this country. It requires to be grown in a warm green-house, in rough sandy peat; to have plenty of water when growing; but, when the stem and leaves die down, to be kept barely moist, and be re-potted when the bulb begins to push in spring. The flowers are produced in an erect raceme, six inches long; they are of a rich orange-yellow, having numerous light green veins upon the ground colour. Each blossom is two inches across, and a dozen or more in each raceme. It is a very pretty flowering species.

Cymbidium Mastersii. Masters's Cymbid. Orchidaceæ. Gynandria Monandria. (Bot. Reg. 50.) Messrs. Loddiges' obtained this new species from the East Indies. The flowers are pure white, with a streak of yellow on the lip, and a few small spots of pink. They are sweet scented, with an almond fragrance. Each flower is about 2½ inches across. It is a very delicate and pretty species.

Azalea Lætitiæ. Garden Hybrid. This handsome and fragrant hybrid was raised at Spofforth Gardens, from the seed of a common Rhododendron ponticum, impregnated, in the greenhouse, by pollen of an Azalea; we understand, an orange-coloured one. The flowers are produced in fine heads, white streaked, and tinged with yellow.

Eremostachys laciniata. Jag-leaved Desert-rod. (Bot. Reg. 52.) Lamiaceæ. Didynamia Gymnospermia. It is a hardy perennial herbaceous plant, a native of the eastern side of Caucasus. It grows erect, from three to five feet high, blooming from May to August. The flowers are produced in whorls; a pale sulphur, with a deep yellow lip, margined with crimson. It is grown in the garden of the London Horticultural Society.

Gompholobium versicolor var. caulibus purpureis. Changeable purple-stemmed variety. (Bot. Mag. 4179.) Leguminosæ. Decandria Monogynia. Mr. James Drummond sent seeds of this very pretty greenhouse suffruticose plant from the Swan River colony to Messrs. Lucombe and Pince, of Exeter Nursery. It is an upright branching small shrub, with deep purple branches. The flowers are produced in profusion. At their first opening they are of a deep rich scarlet-red; and, as they increase in age, become of an orange, with red margin. It is a very beautiful variety, and merits a place in every greenhouse. Each flower is about an inch and a quarter across.

**Echinocactus multiflorus. Many-flowered.** (Bot. Mag. 4181.) This very singular species is grown in the noble collection of Cactuses of Mr. Palmer of Stockwell, near London. It is one of the globose-formed kinds, having five long spines at each areolæ. The flowers are produced numerously at the crown; they are white, with a spot of green at the point of each petal, and in some parts a slight tinge of rose. Each blossom is near three inches across.

**Habrothamnus fasciculatus. Cluster-flowered.** (Bot. Mag. 4183.) Solanaceæ. Pentandria Monogynia. A native of Mexico, which is in the collection of Messrs. Lucombe and Pince of Exeter. It is a handsome greenhouse shrubby plant, which bears numerous close-placed terminal heads, of bright red tube-formed flowers. Each blossom is about an inch long. It well deserves a place in the greenhouse.

**Griffinia hyacinthina. Hyacinth blue-flowered.** (Pax. Mag. Bot.) Amaryllidaceæ. Hexandria Monogynia. It is a bulbous perennial, discovered in Brazil; requires to be forwarded in a hothouse, or hot-bed frame, for a short time in spring; and, when the flower-stems appear, then be removed to the greenhouse, or conservatory, to bloom. The flowers are produced in large heads, each blossom being from two to three inches across. The centre pure white, and the upper half of each petal of a rich violet blue.

**Ornithogalum aureum. Golden-flowered Star of Bethlehem.** (Pax. Mag. Bot.) Liliaceæ. Hexandria Monogynia. A native of the Cape of Good Hope, which has bloomed in the fine collection of plants belonging to Mrs. Wray of Oakfield, near Cheltenham. It will flourish either in the greenhouse, or in a warm aspected border, against a wall. The flowers are produced in racemes, of from twelve to eighteen inches long. Each flower is an inch and a half across; varying in colour from a bright yellow to a rich deep orange. It is a very beautiful flowering plant, well deserving cultivation.

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### PLANTS NOTICED IN BOTANICAL REGISTER, NOT FIGURED.

The only marked distinction between the beautiful yellow and white Orchis sambucina of the Alpine mountains, and Orchis provincialis is, that the latter has the tubers undivided, and the former belongs to the division which has palmate tubers; sambucina having short prominences at its base. Orchis Schleicheri grows in company with the above; the flowers are crimson, with an orange throat. The former are fragrant, but the latter are scentless.

**Ornithidium miniatum.** An orchideæ from Columbia. The flowers are of a rich crimson vermilion, with the lip yellow, edged and blotched with crimson. It is in Messrs. Rollisson's collection.

**Eria Dillwynii.** A native of the Phillippine Islands. The flowers are of a pale lemon colour; a most profuse bloomer. It has flowered at Pennlergare, in the collection of Dillwyn Llewellyn, Esq.

### NEW OR INTERESTING PLANTS SEEN IN NURSERIES, GARDENS, &c.

**Buddlea Lindleyana.** This new species has bloomed in the conservatory of the London Horticultural Society. It was sent there from China. The flowers are produced in racemes of about six or eight inches long. Each flower consists of a long curved tube, with a very rich violet four-cleft spreading border. When the plant is grown in pots it appears to grow somewhat twiggy and loosely; but, when grown in the open bed in the conservatory, becomes a very neat bush. Some plants grown in the open air last summer remained out during winter; and, although the tops perished, the plants have pushed vigorous shoots this season from underground.

**Tetrunema Mexicana.** This plant very much resembles the Pentstemon tribe, particularly like Parguta, both in form and colour. Its lovely blue flowers being produced in profusion during the winter and spring months renders it a very interesting object. It is a dwarfish plant, requiring similar treatment to a Gloxinia; does best in a stove, or warm greenhouse, and it merits a place in every one, as well as in a dwelling room. It can be procured at a very reasonable price at some of the extensive nurseries.

**Dais cotinifolia.** A shrub, from the Cape of Good Hope, and forms a very showy greenhouse plant, much resembling a Pimelea. The flowers are of a rich pink, and produced in showy heads. It is in the collection at Kew, and deserves to be in every greenhouse. It blooms during the summer months.

**Casselia integrifolia.** Of the natural order Verbenaceæ. It is a native of Brazil; a stove-plant; blooming from March to September. The flowers are like those of a small pale blue salvia. In Mr. Low's collection,

**Rhodosthema Gardenioides.** It has a leaf like a Luculia; the flowers are very fragrant, white, and in form like a white jasmine. At Mr. Low's.

**Acuba Japonica var** . This very handsome variety has been sent to this country by Dr. Siebold. The leaf is large, having the centre, comprising nearly half of the surface, a rich yellow colour, and surrounded with a broad band of green. It is a very noble and beautiful shrubby plant. Mr. Low has it in-doors; but it is very probable it will be found as hardy as the original species.

**Lisianthus glaucophyllus.** The flowers are about half the size of L. Russellianus, and of a darker colour. At Mr. Low's.

**Pæonia Whitmannia.** It is an herbaceous species, recently sent from Siberia. The flowers are yellow, and said to be very magnificent. At Mr. Low's.

**Ixora.** A new species, sent by Mr. Low, jun., to the Clapton Nursery. It is stated that the heads of flowers are larger than those of the Hydrangea hortensis, and of a brilliant scarlet colour. It is expected to be one of the finest plants which has been brought to this country. We were informed that 100*l.* had been offered for the plant, but refused.

**Dianthus Goethadsii.** The flower-stems rise to a foot high. The flowers are very double, 1½ inch across, produced in heads; they are a bright rosy crimson, with a dark centre. The plant is as hardy as other double ones, flourishes in the open bed in summer, and to be protected in winter, in a cool frame, or by a small glass cover, pot, &c. At Mr. Low's.

**Columnea.** A new species has been received from Mr. Low, jun. The flowers are of a bright scarlet, with a purple calyx.

**Gesneria Geoldiana.** The flowers are a bright scarlet outside, and a rich golden-yellow inside. They have a few very distinct dark spots inside, producing a very pretty effect. At Mr. Low's.

**Spirea Douglassi.** It is a hardy shrub, growing two to three feet high. The flowers are produced numerously, in spikes; a pretty rosy-lilac colour. It is a neat plant for the shrubbery. At Mr. Low's.

**Barleria.** New species. An erect growing plant, bearing terminal spikes of large handsome (Justicia-like) flowers, of a rich violet-blue. It blooms a long period. At Messrs. Henderson's.

# PART III.

# MISCELLANEOUS INTELLIGENCE.

## QUERIES.

**On a Plan for a Flower Garden, &c.**—A constant subscriber to the Floricultural Cabinet would be glad if any of your correspondents would inform her the best way to lay out a piece of lawn thirty-six yards long and eleven broad in flower-beds. At present there are eight St. Andrew's crosses and some oblong beds; but they offend the eye as being too angular. Any hint will be thankfully received by your constant subscriber,

Sept. 9th. J. R.

**On a List of Twenty-four Phloxes.**—The names of 24 of the very best herbaceous Phloxes in the October Number of the Cabinet would much oblige

A Subscriber in Wiltshire.

[Purpurea perfecta, Captivation, Eye-bright, Oracle, Archduchess, Brilliant, Broughtonia, Bruceii, Beauty, Compacta alba, Cordata grandiflora, Formosa, Glomerata, Jenkinsonia, Lindleyana, Longiflora purpurea, Louisa, Murrayana, Pendulina, Princesse Clementina, Princesse Marianne, Speciosissima, Striata delicatissima, and Van Houttei. The description of each may be seen in the advertised list inserted in the last March Number of our Magazine. The price will be much lower now than at that season.—Conductor.]

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**On sowing Seeds of Hyacinths.**—Having seeds of some fine Hyacinths, I am anxious for some information respecting them, proportion of sowing, the description of soil most suited to them, and the general treatment required by them. An answer in your next will much oblige

Shrewsbury. M. A. H.

[The seed usually ripens by June or July; when so obtained, sow it a few days after being gathered in a pot or box, in light sandy loam, half an inch deep, and place it in a cool frame under glass, say a spent cucumber or melon bed; in three weeks they usually vegetate; they must be kept growing as long as they will, then allowed to become nearly dry, and be so preserved through winter. In February following they would push again; and, if the pot or box is not crowded, they had best be unmoved, and remain to grow so through the season, and be kept dry from the time of their foliage withering till the planting season. About the middle of October they may be carefully taken up and planted at a few inches apart in a box, &c.; and at the following planting season they may be planted in the open bed, &c., as is done to full-grown bulbs. We repeat, only just keep the soil for the first two rest seasons from becoming dust dry, not wet, and be kept from frost. Seed collected late had best be sown the first week in April; it is much more successful than if sown in September or October, as has generally been done in bygone years.—Conductor.]

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**On Tobacco Water.**—You have often mentioned that tobacco water being applied to plants infested with green fly, it would destroy the insect. I should be much obliged if you would inform me how the liquid is to be prepared, and how applied. A. B.

[The liquid is prepared by boiling a proportion of tobacco in a quantity of water for a quarter or even half an hour, and when cool is fit for use. However strong it is it does not in the least injure the plant to which it is applied; and the stronger it is, the more effectual it answers the intended purpose. To immerse the entire top of a plant in the liquid is best. This, with small plants, is readily done; larger ones may in general have the branches bent so as to immerse them successively. Where neither can be done, then syringe the under side of the leaves as well as the upper. Sometimes a repetition is required; it is best to do it as soon as any insect is discovered. We have tried the plan on many occasions, and always succeeded. Tobacco water can generally be procured at a tobacco manufactory at about 1*s.* per gallon. Gas water will answer, too; it must be weakened so as not to be injurious to vegetation. An experiment on a waste plant will point out the degree. British-grown tobacco, such as is usually grown in gardens, will answer the purpose in the former case. The mode of preparing it is—pull up the full-grown plants, and hang them, roots upwards, in a glass-roofed green-house, peach-house, or similar place, where the temperature will be 70 or 80 degrees, in order to dry. When well dried, dip them in water, and again dry them; this must be repeated once or twice more; after which, when quite dry, put them closely in bags, keep in a dry place, and they will be fit for use. When the liquid is to be made, chop up the stalks and leaves, and boil them in a due proportion of water for half an hour. When cool, it may be used. The liquid will keep well corked up tight in bottles, or bunged up close in a cask.—Conductor.]

**On a List of late blooming Roses.**—I should feel particularly obliged, if you or some one of your numerous subscribers, would furnish me with a list of thirty of the best Roses (for planting in a bed on the lawn) perpetuals, or such other varieties, as will flower from August till Christmas, or nearly then, the colour also, as well as an early answer, will be esteemed a favour by

Kent. A Subscriber from the Commencement.

Bernard; pink, superb, dwarf, very fragrant.

Mogoda, or Crimson Superb; brilliant crimson, shaded with purple, distinct and beautiful.

Grand et Belle; bright rose, very large and fragrant.

Van Mons; pink, veined with red, large.

Aubernon; brilliant crimson, perfect, superb, very fragrant.

Comte d'Eu; brilliant carmine, approaching to scarlet, dwarf.

Duc d'Aumale; bright crimson, beautiful.

Duchess of Sutherland; bright rose, mottled, large, superb.

Lady Alice Peel; deep pink, superb, beautiful.

Louis Bonaparte; rosy-crimson, very distinct.

Prince of Wales; bright lilac, blooming in large clusters.

William Jessie; light crimson, lilac tinged, large, beautiful.

La Bedoyere; bright red, very distinct.

Bouquet de Flora; deep carmine, very superb.

Comice de Seine et Marne; cherry-red, superb.

Desgaches; bright rose, perfect.

George Cuvier; brilliant rosy carmine.

Grand Capitaine; velvet-scarlet, brilliant, beautiful, dwarf habit.

Madame Nerard; beautiful blush, perfect, superb.

Madame Souchet; blush, edged with red, distinct and superb.

Proserpine; brilliant crimson, shaded with purple, superb, dwarf.

Queen, fawn coloured rose, beautiful.

Souchet; crimson, shaded with purple, perfect, superb.

Souvenir de la Malmaison; pale flesh, tinted with fawn, large, superb.

Salfaterre; bright sulphur, large and very superb, but is rather tender in a cold climate.

Clara Sylvain; pure white, distinct, dwarf, superb.

Madame Bureau; white, distinct and pretty.

Cramoise Superiore; brilliant crimson, most beautiful.

Mrs. Bosanquet; pale fresh, wax-like, superb.

Fabvier; fine brilliant scarlet, superb.

## REMARKS.

**Cloth of Gold Rose.**—It is a rich yellow, large and superb. It is not yet so bright in colour in this country as it grows in France. The petals are of a thick magnolia-like substance. It blooms well against a south aspected wall or in a greenhouse.

**Persian Yellow.**—Is an Austrian Briar, the flowers full double, deep yellow, growing and blooming freely. It is a very superb Rose.

Both kinds deserve a place in every collection.

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**Salisbury Plain Dahlia Show.**—Salisbury, or rather Stonehenge, Dahlia show is, in general, one of the earliest of the great exhibitions, and brings in all the early flowers. This season the display was very great. The exhibition may be called extensive; no less than eleven nurserymen competed for the prizes in that class, and the prizes were liberal. In the class of new flowers there were a number of competitors, and it is a pity the importance of this class is not better understood, for it would be the most popular of all. The new flowers of the season formed a very important feature in most of the stands, though, for some of them, which went out in large numbers and late, the show was too early. Of seedlings there was a good show, and few prizes were awarded for none but the best class were honoured with the distinction. The judge and Glenny, were instructed that they were not limited, and might give as many first and second class as they thought proper. They, however, declined doing more than pointing out such as they considered might go forth to the public at the usual price of half a guinea, without saying anything about first or second class.

*List of Prizes.—Nurserymen*, Twenty-four Blooms—1. Mr. Keynes, of Salisbury, with Burnham Hero, J. S. Richardson, Cleopatra, Lady St. Maur, Eclipse, Mrs. Shelly, Victory of Sussex, Antler, Gloria Mundi, Standard of Perfection, Princess Royal, Beauty of Sussex, Aurantia, Indispensable, Hofer, Admiral Stopford, Queen of Roses, Beeswing, Raphael, Empress of Whites, Nonpareil, Essex Triumph. 2. Mr. Drummond, Bath, with Beeswing, Victory of Sussex, Vivid, Marchioness of Ormonde, Perpetual Grand, Princess Royal, Lady St. Maur, Catleugh's Eclipse, Lord Howden, Alice Hawthorn, Essex Triumph, Cleopatra, Bathonia, Mrs. Shelly, Aurantia, Springfield Rival, Admiral Stopford, Fullwood Hero, Beauty of Sussex, Queen of Roses, Standard of Perfection, Sir J. S. Richardson, Nonpareil, Sir H. Pottinger. 3. Mr. Brown, Slough, with Rubens, Lady St. Maur, Perpetual Grand, Princess Royal, Aurantia, Victory of Sussex, Cleopatra, Sir J. S. Richardson, Queen of Roses, Standard of Perfection, Ophir, Rembrandt, Nutwith, Duchess of Richmond, Beeswing, Queen, Indispensable, Springfield Rival, Admiral Stopford, Beauty of Sussex, Nonpareil, Essex Triumph, Delight, Raphael. 4. Mr. Spary, of Hungerford, with Candidate, Lady Antrobus, Cook's Albion, Cleopatra, Perpetual Grand, Lady St. Maur, Beeswing, Mrs. Shelly, Fullwood Hero, Dazzle, Aurantia, Essex Triumph, Bridesmaid, Sir R. Sale, Essex Champion, Standard of Perfection, Antler, Beauty of the Plain, Rembrandt, Nonpareil, America, Duchess of St. Albans, Springfield, Phenomenon. 5. Mr. Southley, of Newbury, with Royal Standard, Royal Sovereign, Marquis of Lansdowne, Beauty of Sussex, Argo, Scarlet Eclipse, Victory, Sir J. S. Richardson, Emma Noke, Girling's Prince of Wales, Beeswing, Novelty, Essex Triumph, Phenomenon, Duchess of Richmond, Aurantia, Sir R. Sale, Lady Antrobus, Proctor's Nonpareil, Emperor of the Whites, Standard of Perfection, Majestic, Sir J. Johnstone, Beauty of the Plain. 6. Names not given in. 7. Mr. Heale, of Calne, with President of the West, Dodd's Prince of Wales, Sir J. S. Richardson, Admiral Stopford, Beauty of Sussex, Hampstead Rival, Widnall's Queen, Aurantia, Princess Royal, Essex Triumph, Langley's Duke of York, Beeswing, King of the West, Empress of the Whites, Proctor's Nonpareil, Prince of Waterloo, Bermondsey Bee, Queen of Roses, Orange Superb, Standard of Perfection, Harrison's Duke of York, Indispensable, Sir R. Sale, Dazzle. 8. Mr. Heale, of Devizes, with Perpetual Grand, Aurantia, Sir R. Sale, Gloria Mundi, Springfield Rival, Delight, Great Mogul, Harrison's Duke of York, Dodd's Prince of Wales, Hodge's Competitor, Orange Superb, Essex Triumph, Marchioness of Ormond, Beeswing, Beauty of the Plain, Rubens, King of the West, Princess Royal, Nonpareil, Empress of the Whites, Bermondsey Bee, Standard of Perfection, Prince of Waterloo. *Amateurs*, Twelve Blooms—1. Mr. Fox, with Spitfire, Cleopatra, Mrs. Shelly, Lady St. Maur, Lady Sale, Victory of Sussex, Marchioness of Ormonde, Sir J. S. Richardson, Standard of Perfection, Perpetual Grand, Essex Bride, Prince of Waterloo. 2. J. M. Yeeles, Esq., with Beeswing, Aurantia, Sir J. S. Richardson, Cleopatra, Gloria Mundi, Fulwood Hero, Essex Triumph, Duchess of Richmond, Princess Royal, Widnall's Queen, Albion, Admiral Stopford. 3. Names not given in. 4. Mr. Hopkins, with Model, Indispensable, Mrs. Shelly, Cleopatra, Beauty of Sussex, Perpetual Grand, Antagonist, Nonpariel, Orange Superb, Virgil, Dazzle, Standard of Perfection. 5. Names not given in. 6. Mr. Keate, with Indispensable, Lady Harland, Twyford's Perfection, Essex Triumph, Duchess of Richmond. Dodd's Prince of Wales, President of the West, Emperor of the Whites, Admiral Stopford, Delight, Beauty of the Plain, Queen of Roses. *Amateurs.* Six Blooms—1. Mr. Yeeles, with Sir J. S. Richardson, Cleopatra, Gloria Mundi, Nonpariel, Princess Royal, Victory of Sussex. 2. Mr. Durwed, with Cleopatra, Hero of Stonehenge, Standard of Perfection, Empress of the Whites, Queen of Roses, Hero of Waterloo. 3. Mr. Hopkins, with Nonpariel, Mrs. Shelly, Model, Orange Superb, Beauty Superb, Standard of Perfection. 4. Mr. Gilward, with Fulwood Hero, Beauty of Sussex, Standard of Perfection, Widnall's Queen, Beeswing, Admiral Stopford. 5. Mr. Brown, of Wilton, Bermondsey Bee, Dazzle, Princess Royal, Duke of York, Standard, Cle 6. Mr. Brown, with Favourite, Dazzle, Aurantia, Queen of Roses, Mrs. Princess Royal. *Amateurs*, Six new Flowers—1. Mr. Dodd, with Keynes's Antler, Fulwood Hero, Beeswing, Keynes's Dazzle, Gloria Mundi, Empress of the Whites. 2. Mr. Yeeles, with Red Rover, Albion, Alice Hawthorn, Gloria di, Cleopatra, Beeswing. 3. Mr. Hopkins, with Antler, Dazzle, Cleopatra, ss of Ormond, Duke of York (Keynes), Duke of York (Langley). f 1844—Mr. Gaines, for Princess Radzville; Mr. Whale, for Lady Cornwallis; Mr. Dodd, for Enterprize; Mr. Spary, for Marquis of Aylesbury; Mr. Sorrel, for Caractacus; Mr. Keynes, for Sir Edward Antrobus; Mr. Dodd, for a fancy purple and white bordered flower, called Punch. *Seedlings of* 1845—Mr. Brown, of Slough, for a shaded purple, and Mr. Girling for a fancy flower.

Training Heaths.—Mr. Campbell, of Warminster, trains many of his Heaths into pyramids, which he places along each side of a wide path in his conservatory. The effect is somewhat novel, and in such situations very good. He merely selects a strong leading shoot, and keeps the remainder constantly cut back. The following sorts he has been successful with :—Erica Linnæa nova, E. Melastoma, E. Grandinosa, E. Laxa, E. Spumosa, E. Colorans, E. Colorans verna, E. Densa, E. Ventricosa breviflora, E. Nigrita, E. Sebana, E. Linnæoides superba, E. Sparsa, E. Persolata, E. Hyemalis, and E. Wilmoreana.

Cactuses.—Whenever the seed is ripe, sow it in sand, then place the pot on a shelf in a *warm* and *dry* situation. It will vegetate readily. Little water should be given to the plants when up. As they root well in sand, they need not be potted till they are tolerably strong plants. The best soil to pot them in is loam, peat, and brick rubbish, and be well drained.

## FLORICULTURAL CALENDAR FOR OCTOBER.

*Annual Flower Seeds*, as Clarkia, Collinsia, Schizanthuses, Ten Week Stocks, &c., now sown in pots, and kept in a cool frame or greenhouse during winter, will be suitable for planting out in open borders next April. Such plants bloom early and fine, and their flowering season is generally closing when spring-sown plants are coming into bloom. Seeds of many kinds now sown in the open borders endure winter and bloom vigorously early next season.

*Biennials*, as Scabious, Sweet Williams, Canterbury Bells, &c., should *now* be planted where to bloom next season.

*Camellias.*—Thin the flower buds, which will tend to preserve more certainly those for blooming, and cause them to be vigorous. Place some in the greenhouse early, that are desired to bloom in December, or before, in some cases.

*Carnation Layers* should immediately be potted off.

*China Rose Cuttings* now strike very freely; buds may still be put in successfully.

*Dahlias.*—Where the laterals are very numerous, they should be thinned out so as to have vigorous blooms. Towards the end of the month collect seeds of the early-blown flowers. Heap soil round the stem to save the crown from frost.

Greenhouse plants will generally require to be taken in by the end of the month. If allowed to remain out much longer, the foliage will often turn brown from the effect of cold air. The earlier succulents are the better.

*Lobelias.*—Offsets should be potted off, so as to have them well rooted before winter.

*Lisianthus Seed* now sown will produce plants for next year's blooming.

*Mignonette* may now be sown in pots, to bloom in winter.

*Pelargoniums*, cuttings of, may now be put off; plants of which will bloom in May.

If Pelargoniums have not been headed down, they should now be done, the shoots may push a little before repotting for winter. Plants which have headed down, and have pushed shoots two inches long should be repotted.

*Pinks*, pipings of, if struck, may be taken off and planted in the situa intended for blooming in next season.

*Plants of Herbaceous Calceolarias* should now be divided, taking off o and planting them in small pots. Cut off the flower stems of such as have blooming, to induce shoots to be vigorous.

*Plants of Chinese Chrysanthemums* should be repotted if necessary; f done later, the blossom will be small. Use the richest soil. Pinch off the h to cause the production of laterals, so as to have a head of flowers. Large pl may be taken up from the open borders and potted, they will bloom fine due care.

*Plants of Pentstemons* should be divided by taking off offsets, or increase striking slips. They should be struck in heat.

*Pansies.*—The tops and slips of Pansies should now be cut off, and be inse under a hand-glass, or where they can be shaded a little. They will root fre and be good plants for next season.

*Ranunculus* beds should now be prepared as follows:—The depth of soil t two feet and a half, of a rich clayey, friable loam, retentive of moisture; ab six or eight inches from the surface to be a rich light loam, of a sandy nat Remove the whole of the soil with the remains of the dung given last year, turn up the subsoil a whole spade in depth, breaking it well. If the beds allowed to remain in this state for a day or two to sweeten the subsoil, it will an advantage. Then place upon the subsoil a layer of cow-dung, at least year old, four inches thick; then scatter over it the fine powder of new-slak lime, to correct any acidity and destroy the worms. Then fill up with new lig soil, taken from the surface of the old tulip-bed or potato-ground, which h been frequently turned to sweeten it.

*Sweet William* seed now sown will soon strike and the plants bloom NE season.

Seeds of many kinds of flowers will be ripe for gathering this month.

*Tigridia, Commellina,* and similar roots, may be taken up about the end of t month.

*Verbenas.*—Runners of this plant should now be taken off, planting them small pots, half filled with potsherds, and the rest with good loamy soil, the placing them in a shady situation. It should be attended to as early in t month as convenient. When taken into a cold frame or greenhouse for wint protection, much of the success depends on being kept near the glass; or sink box or two, half filled with potsherds, and the other good loamy soil, round t plant, so that the runners, being pegged down to the soil, will soon take root the joints. When a sufficient number are rooted, separate the stems from th parent plant, and those in the boxes will be well established, and, being remove before frost. are easily preserved in winter, as done with those in pots.

When Lilies, Crown Imperials, Narcissuses, &c., require dividing, take the up now, and replant immediately; also plant Hyacinths and Crocuses, &c either in beds or in pots for forcing.

When Petunias, Heliotropium, Salvias, Pelargoniums, (Geraniums,) &c., tha have been grown in open borders, and it is desirable to have bushy plants f the same purpose the next year, it is now the proper time to take off slips (selec the short and well-ripened ones), and insert a number in a pot; afterwards plac them in a hot-bed frame, or other situation having the command of heat. Whe struck root, they may be placed in a greenhouse or cool frame to preserve then from frost during winter. When divided and planted out the ensuing May i open borders of rich soil, the plants will be stocky, and bloom profusely.

Greenhouse plants yet out will require to be taken in by the middle of th month; if allowed to remain out much longer, the foliage will often turn brow from the effects of cold air. Where they are in all air should be admitted b day. The plants should not be watered over head at the close of the day. Wate the soil too only in the early part of the day, if not so attended to the leaves will be liable to damp off. Loosen the soil at the surface frequently, it contributes much to health.

*1. BOUVARDIA FLAVA.*　　*2. CALANDRINIA*

# THE
# FLORICULTURAL CABINET,
## NOVEMBER 1st, 1845.

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## PART I.

## EMBELLISHMENTS.

### ARTICLE I.

#### 1. BOUVARDIA FLAVA.—(Yellow Flowered.)

This very pretty and new species we lately received from Mr. Van Houtte, nurseryman of Ghent, who, in addition to the plant and a coloured figure of the flower, forwarded us the following communication of the plant, culture, &c. It will prove a very striking companion to the fine scarlet Bouvardias triphylla, Jacquinii, and versicolor, whether grown in pots in the greenhouse, or in the open beds in summer; and its beauty, freeness of blooming, &c., render it deserving a place in every greenhouse and flower garden. Mr. Van Houtte observes as follows:—

"This is a very interesting and entirely new acquisition to our cultures; stubbed in short, and kept shrubby, it will long continue to form, by its numerous and light hanging flowers, pendant on their triangular peduncles, a spring ornament for the green-house, into which it must be placed during the winter. The beautiful yellow colour of the flowers forms a most happy and agreeable contrast to the dark purple and varied shades of the foliage. In order to obtain the latter effect, the plant must, during the fine season, be exposed, if not to the direct rays of the sun, at least in mid shade, so as to enjoy a vast and airy space.

"It delights in a soil sufficiently rich in decomposed vegetable matter, and, in consequence of its almost continued growth, frequent waterings; winter excepted.

"It will prosper in the open ground, if transplanted into the borders towards the end of May; in which case it must be re-potted about the 10th of September, placed in the shade or cold-pit, and brought into the green-house about the beginning of October.

"Its increase is as simple as easy by cuttings of the young branches, in a hot bed, and under bell-glasses. The young scions cut at the articulation of a branch will root in a few days, and may be treated like the mother plants; the only precaution necessary to be taken is, not to expose the new shoots to the open air, or to the sun, before being accustomed thereto by degrees; the delicacy of the young branches being so great that the sudden contact of either might occasion some disorder in the new plants. Forced early in spring, as is done with other green-house plants, this plant has had but little success; only producing small (and, as one may say), abortive flowers, of an undecided colour: left to itself, and subject to all the influences of the spring, and of the atmosphere, its vegetation at once proceeds with redoubled vigour; its leaves twice as large, and are now spotted with red; the flowers much more numerous, longer, and double the size, acquire a lively colouring of the most beautiful yellow; it is therefore important, with regard to this beautiful species, to let nature work alone."

### 2. CALANDRINIA UMBELLATA.

This is another beautiful addition to this lovely tribe of flowers. Messrs. Veitch's, of Exeter Nursery, received it from their collector, Mr. Lobb. They exhibited it at the Chiswick Horticultural show in July last. It is a very profuse bloomer, and its rich coloured flowers produce a very striking appearance. It will well deserve a place either in pots in the greenhouse, or in the open border.

## ARTICLE II.

## THE METROPOLITAN FLORAL EXHIBITIONS.

### METROPOLITAN FLORICULTURAL SOCIETY, *September* 25.

THE September exhibition of this Society has for some years been acknowledged as the grand Dahlia show of the season, the competitors being many of the principal growers throughout the country, and the blooms placed to view at this meeting justified this character.

The number of stands produced was probably not so extensive as they would have been, had not an early frost in several localities much destroyed the flowers; the generality of those shown, however, were very good. A considerable number of seedlings were offered for notice, some of which were really good; our notes of them was made from a very careful inspection, and may be relied upon. The show was held in the gardens of Cremorne House, Chelsea.

The following is a list of the flowers, comprising the prize stands in the various classes.

## CLASS I.

### 24 *Blooms: open to Nurserymen only.*

1st Prize, Mr. Turner, Chalvey, for fine specimens of Indispensable (Girling), Pickwick (Cormack), Aurantia (Sparry), Cleopatra (Attwell), Bermondsey Bee (Proctor), Nonpareil (Proctor), Perpetual Grand (Brown), Competitor (Hodge), Duchess of Richmond (Fowler), Trafalgar, Lord Howden (Harrison), Rembrandt (Brown), Mrs. Shelley (Mitchell), Princess Royal (Hudson), Beauty of the Plain (Sparry), Spitfire (Fisher), Beeswing (Drummond), La Grand Bauduin (Low), Alice Hawthorn (Drummond), Raphael (Brown), Standard of Perfection (Keynes), Marchioness of Ormond (Bourn), Dowager Lady Cooper (Jackson), and Springfield Rival (Inwood).

2nd Prize, Mr. Girling, Stowmarket, for Lord Howden, Gloria Mundi, Princess Royal, Ashlete, Biondetta, Mrs. Shelley, Blue Bonnet, Standard of Perfection, Victory of Sussex, Optimus, Essex Triumph, Antagonist, Reubens, Cleopatra, Phenomenon, Queen of Roses, Alice Hawthorn, Gloricum, Bermondsey Bee, Rembrandt, Lady Leicester, Admiral Stopford, and Dazzle.

3rd Prize, Mr. Brown, Slough, with Queen of Roses, Pickwick, Rembrandt, Phenomenon, Duchess of Richmond, Indispensable, Nutwith, Raphael, Standard of Perfection, Sir J. S. Richardson, Beeswing, Baudoin, Competition, Mrs. J. Richardson, Essex Champion, Delight, Bermondsey Bee, Perpetual Grand, Ophir, Springfield Rival, Desirable, Cleopatra, Northern Beauty, and Princess Royal.

4th Prize, Mr. Bragg, Slough, with Orlanda, Springfield Rival, Cleopatra, Admiral Stopford, Antagonist, Duchess of Richmond, Essex Bride, Burnham Hero, Victory of Sussex, Beauty of the Plain, Essex Triumph, Aurantia, Great Mogul, Princess Royal, Antler, Blue Bonnet, Indispensable, Vivid, Standard of Perfection, Bermondsey Bee, Beauty of Sussex, Nonpareil, Emperor of Whites, and Beeswing.

5th Prize, Mr. Gaines, Battersea, for Lady Glentworth, Orlando, Bloomsbury, Cleopatra, Perpetual Grand, Albion, Mrs. Shelley, Hero of Maida, Gloria Mundi, Gaines' Countess of Zetland, Sir J. S. Richardson, Essex Bride, Victory of Sussex, Vivid, Beeswing, Candidate, Princess Royal, Eximia, Essex Primrose, Aurantia, Cheltenham Queen, Rembrandt, and Marc Antony.

6th Prize, Mr. Sorrell, Chelmsford, for Sir J. S. Richardson, Cleopatra, Essex Triumph, Pickwick, Admiral Stopford, Victory of Sussex, Phenomenon, Widnall's Queen, Antler, Consolation, Duchess of Richmond, Princess Royal, Conqueror of the World, Standard of Perfection, Queen of Roses, Sir A. Pottinger, Beeswing, Mrs. Shelley, Perpetual Grand, Bermondsey Bee, Aurantia, President of the West, Catleugh's Eclipse, and Champion.

Besides the above, three other collections were shown.

## CLASS II.

### 24 *Blooms: open to all Competitors.*

1st Prize, Mr. Turner, Chalvey, for Duchess of Richmond, Raphael, Beeswing, Standard of Perfection, Nonpareil, Trafalgar, Spitfire, Princess Royal, Gloria Mundi, Indispensable, Victory of Sussex, Bathonia, Beauty of Bucks, Pickwick, Admiral Stopford, Beauty of the Plain, Lord Howden, Arethusa, Competitor, Eximia, Cleopatra, Raphael, Springfield Rival, and Bermondsey Bee.

2nd Prize, Mr. Bragg, Slough, for Burnham Hero, Essex Bride, Admiral Stopford, Blue Bonnet, Beeswing, Essex Triumph, Mrs. Shelley, Duchess of Richmond, Beauty of Bucks, Antagonist, Spitfire, Vivid, Lady St. Maur, Cleopatra, Raphael, Great Mogul, Beauty of Sussex, Lady Antrobus, Aurantia, Candidate, Beauty of the Plain, Nonpareil, Springfield Rival, and Bermondsey Bee.

3rd Prize, Mr. Girling, Stowmarket, for Biondetta, Mrs. Shelley, Beeswing, La Polka, Cleopatra, Antagonist, Gloria Mundi, Athlete, Admiral Stopford, Antler, Phenomenon, Princess Royal, Raphael, Lord Howden, Standard of Perfection, Alice Hawthorn, Zoe (Truelle), Blue Bonnet, Highgate Surprise, Trafalgar, Candidate, Oudine, Queen of Roses, and Essex Triumph.

4th Prize, Mr. Cook (amateur), Notting-hill, for Mrs. Shelley, Tournament, Perpetual Grand, Victory of Sussex, Raphael, Lord Howden, Prince of Wales, Standard of Perfection, Admiral Stopford, Albion, Bathonia, Phenomenon, Antagonist, Princess Royal, Sir J. S. Richardson, Andrew Hofer, Competitor, Nonpareil, Springfield Rival, Queen of Roses, Aurantia, Essex Scarlet, and Bermondsey Bee.

5th Prize, Mr. Brown, Slough, for Queen of Roses, Perfect Grand, Phenomenon, Essex Triumph, Springfield Purple, Sir J. S. Richardson, Duchess of Richmond, Competitor, Nutwith, Twickenham Rival, Admiral Stopford, Rubens, Princess Royal, Raphael, Beauty of the Plain, Antagonist, Pickwick, Essex Champion, Sir R. Sale, Bermondsey Bee, President of the West, Beeswing, Indispensable, and Springfield Rival.

6th Prize, Mr. Kimberly, Pimley, Coventry, for Perpetual Grand, Mrs. Shelley, Pickwick, Beeswing, Scarlet Eclipse, Duchess of Richmond, Essex Triumph, Andrew Hofer, Admiral Stopford, Cleopatra, Maria, Vivid, Optimus, Candidate, Marc Antony, Blue Bonnet, Rembrandt, Bathonia, Princess Royal, Le Grand Baudoin, Standard of Perfection, Beauty of Pimley, Competitor, and Orange Superb.

7th Prize, Mr. Gaines, Battersea, with Mrs. Shelley, Gloria Mundi, Cleopatra, Beeswing, Essex Primrose, Sir J. S. Richardson, Vivid, Marc Antony, Aurantia, Alphonso, Burnham Hero, Princess Royal, Albion, Dazzle, Bloomsbury, Rembrandt, Duke of York, Antler, Countess of Zetland, Commodore, Phenomenon, Cheltenham Queen, Victory of Sussex, and Mary Ann.

8th Prize, Mr. Hoare, with Princess Royal, Pickwick, Mrs. Shelley, Duchess of Richmond, Marquis of Lansdowne, Catleugh's Eclipse, Coronation, Sir J. S. Richardson, Beeswing, Essex Triumph, Victory of Sussex, Maria, Will Watch, Beauty of the Plain, President of the West, Aurantia, Phenomenon, Competitor, Lady Harland, Standard of Perfection, Cox's Yellow Defiance, Bermondsey Bee, Nonpareil, and Rembrandt.

Three other competitors.

## CLASS III.

### 12 *Blooms: for Amateurs residing beyond five miles from London.*

1st Prize, Mr. Howard, Burnham, for Victory of Sussex, Burnham Hero, Cleopatra, Standard of Perfection, Beeswing, Essex Triumph, Lady Cooper, Nonpareil, Bermondsey Bee, Admiral Stopford, Aurantia, and Princess Royal.

2nd Prize, Mr. Hopkins, Brentford, for Nonpareil, Sir J. S. Richardson, Antagonist, Cleopatra, Mrs. Shelley, Beeswing, Princess Royal, Standard of Perfection, Essex Triumph, Rembrandt, and Aurantia.

3rd Prize, Mr. Collison, Bath, for Lord Howden, Ophir, Cleopatra, Sir J. S. Richardson, Northern Beauty, Mrs. Shelley, Pickwick, Trafalgar, Nonpareil, Asmodeus, Beeswing, and Essex Triumph.

4th Prize, Mr. Weeks, Chelmsford, for Essex Bride, Antler, Essex Primrose, Beeswing, Cleopatra, Essex Triumph, Springfield Rival, Rembrandt, Bathonia, Nonpareil, Admiral Stopford, and Essex Champion.

5th Prize, Mr. Edwards, Hilperton, for Alice Hawthorn, Mrs. Shelley, Victory of Sussex, Cleopatra, Beeswing, Phenomenon, Burnham Hero, Trafalgar, Prince of Wales, Perpetual Grand, Lady Harland, and Essex Triumph.

6th Prize, Mr. Hore, for Widnall's Princess Royal, Mrs. Shelley, Beeswing, Sir J. S. Richardson, Cleopatra, Standard of Perfection, Lady Harland, Bermondsey Bee, Aurantia, President of the West, Phenomenon, and Maria.

7th Prize, Mr. Weedon, Hillingdon, for Princess Royal, Beeswing, Cleopatra, Blue Bonnet, Mrs. Shelley, Phenomenon, Antagonist, Sir J. S. Richardson, Essex Triumph, Raphael, Widnall's Queen, and Widnall's Eclipse.

8th Prize, Mr. Humber, Southall, for Cleopatra, Mrs. Shelley, Royal, Beeswing, Aurantia, Nonpareil, Raphael, Lady Harland, and Rembrandt.

## CLASS IV.

### 12 *Blooms: for Amateurs, residing within five miles of London.*

1st Prize, Mr. Cook, Notting-hill, for Victory of Sussex, Tournament, Antagonist, Mrs. Shelley, Lord Howden, Princess Royal, Perpetual Grand, Sir J. S. Richardson, Essex Triumph, Bathonia, Raphael, and Phenomenon.

2nd Prize, Mr. Proctor, Bermondsey, for Beeswing, Blue Bonnet, Victory of Sussex, Mrs. Shelley, Standard of Perfection, Princess Royal, Essex Triumph, Bridesmaid, Antagonist, President of the West, Nonpareil, and Queen of Roses.

3rd Prize, Mr. Cowan, Hampstead, with Aurantia, Beeswing, Cleopatra, Princess Royal, Admiral Stopford, Sir J. S. Richardson, Gloria Mundi, Essex Bride, Indispensable, Emperor of Whites, Nonpareil, and Standard of Perfection.

4th Prize, Mr. Legg, Kingsland-road, for Sir J. S. Richardson, President of the West, Competitor, Lady Harland, Princess Royal, Standard of Perfection, Victory of Sussex, Aurantia, Nonpareil, Antagonist, Beeswing, and Phenomenon.

5th Prize, Mr. Hunt, Paddington, with Princess Royal, Victory of Sussex, Prince of Wales, Mrs. Shelley, Standard of Perfection, Aurantia, Beeswing, Pickwick, Emperor of Whites, Paul Pry, Queen of Roses, and Nonpareil.

6th Prize, Mr. Edwards, Holloway, with Sir J. S. Richardson, Cleopatra, Victory of Sussex, Aurantia, Lady St. Maur, Beeswing, Polka, Blue Bonnet, Virgil, Hudson's Princess Royal, Standard of Perfection, and Lady Antrobus.

7th Prize, Mr. James, Stoke Newington, with Girling's Prince of Wales, Cleopatra, Aurantia, Perpetual Grand, Antagonist, Beeswing, Hudson's Princess Royal, Mrs. Shelley, Standard of Perfection, Essex Triumph, Dodd's Prince of Wales, and Admiral Stopford.

8th Prize, Mr. Hatham, Haggerstone, with Mrs. Shelley, Victory of Sussex, Candidate, Eximia, Rival Yellow, Blue Bonnet, Marc Antony, Alice Hawthorn, Virgil, Antagonist, Beeswing, and Admiral Stopford.

Three other competitors.

## CLASS V.

### 6 *Blooms of Flowers let out this year: for Amateurs only.*

1st Prize, Mr. Howard, Burnham, with Cleopatra, Beeswing, Marchioness of Ormond, Red Rover, Junius, Gloria Mundi, Empress of the Whites.

2nd Prize, Mr. Ford, for Alice Hawthorn, Beeswing, Cleopatra, Essex Bride, Antler, (Keynes,) and Empress of the Whites.

3rd Prize, Mr. Collison, Bath, with Gloria Mundi, Cleopatra, Sphere, Caledonia, Beeswing, and Lady Sale.

4th Prize, Mr. Cowan, Hampstead, with Gloria Mundi, Beeswing, Cleopatra, Essex Bride, Lady Sale, and Fulwood Hero.

5th Prize, Mr. Fozzard, with Essex Bride, Cleopatra, Beeswing, Gloria Mundi, Emperor of the Whites, and Alice Hawthorn.

6th Prize, Mr. J. Edwards, Holloway, with Essex Primrose, Beeswing, Cleopatra, Gloria Mundi, Essex Scarlet, and Sylph.

Two other competitors.

### CLASS VI.

#### VARIEGATED VARIETIES.

#### 12 *Blooms: open to all.*

1st Prize, Mr. Girling, Stowmarket. with Vicomte Ressequier, Harlequin, Purpurea Alba, Superb, La Vouge, Madame Chauviere, Madame Wallner, Madame Beverche, Surprise, Monsieur Jane Wallner, Nouveau Protea, Zeitgeish, and Archduke Frederick.

2nd Prize, Mr. Gaines, Battersea. with Vicomte Ressequier, Madame Wallner, Harlequin, Oakley, Surprise, Illuminator, Alba Purpurea, Tricolor, (Harrison's,) Maid of Lodi, Striata, Monsieur Wallner, Madame Schauenfield, and Queen of England.

2nd Prize, Mr. Bragg, Slough, with Vicomte Ressequier, Nihil, Harlequin, Miss Watson, Alba Purpurea, Superb, Madame Mortier Bavais, Striata, Surprise, Madame Millez, Louisa, Madame Chauviere, and Alba Purpurea.

Three other competitors.

### CLASS VII.

#### VARIEGATED VARIETIES.

#### 6 *Blooms: for Amateurs.*

1st Prize, Mr. Ford, with Nihil, Oakley, Surprise, Harlequin, Miss Watson, Purpurea Alba, Superb, and Queen.

2nd Prize, Mr. Shepherd, with Archduke, Nihil, Madame Bavais, Miss Watson, Oakley Surprise, and La Vogue.

The eighth and ninth classes comprise Seedlings of 1844 and 1845, our notes upon which being copious, want of room obliges us to defer them until our next number.

In addition to the Dahlias, some Fuchsias, Heartseases, and Verbenas were exhibited, and several prizes awarded.

## ARTICLE III.

## CULTURE OF THE CHILIAN ALSTROEMERIA.

BY MR. LOUIS VAN HOUTTE, OF GHENT.

NOTHING whatever presents more ornament to our gardens, during a great portion of the year, than this beautiful production, whose flowers are at once so numerous and so splendid; and yet nothing can be more easy than its culture and multiplication. The thousand varied, but always charming tints, which tinge the corollas of these Alstrœmerias, present a difficulty in establishing a just horticultural nomenclature for them, as, like their brilliant rivals the Calceolarias, they would defy on that point the most rigid examination. One may affirm without exaggeration that all are beautiful, and one may also infer that they will soon become as popular as the Wallflower, the Mignonette, the Carnation, &c.; in fact, cut for nosegays, to grace the various apartments of the house, no other flowers can be compared with them.

The length, thickness, and number of their fascicled roots hinder them from flourishing under pot-culture; they succeed best in the open ground, in the free air, which, if subjected to the following treatment, they can brave with impunity. A bed is dug about 14 inches deep, in length and breadth proportioned to the number of roots required to be planted, at a foot apart from heel to heel; the bottom of the trench must be filled with rubble of potsherds, fragments of bricks, tiles, &c., in order to permit a prompt and easy drainage. It is then filled with a rich compost, formed of one-third fresh loam, one-third sandy bog earth, and one-third spit dung, and some such strong manure as guano may be added, in the proportion of one-thirtieth of the whole mass. The whole is to be mixed well together, and left in heaps about two months before making use of it.

Each rhizome is planted in the month of October, taking care that its growing point is 10 inches below the surface of the soil. On the frost becoming severe, the bed is covered with a frame-work, and surrounded by muck; the air being abundantly admitted whenever the thermometer may not be below 32° Fahr. We have, however, known the cold to descend to 25°, and the roots not to be injured thereby.

As long as the severe frost lasts, the frame is covered with litter or straw, which is removed at all times when the plants can enjoy the benefit of the sun's rays. So soon as the cold is no longer to be dreaded, the above protections are removed, and the plants whose shoots are already apparent, are left perfectly free to all atmospheric influences, and finally treated like other perennials. They must be very sparingly watered during the ripening of the seeds, and should great rains follow after the seeds are gathered, they must be protected by the frames to prevent the rot. The roots are to be taken up towards the end of July, the rhizomas cleaned and separated; afterwards they may be left exposed on shelves in a very airy dry place, until the moment of replanting.

The splendid collection of Alstroemerias which the abovenamed gentleman possesses has been spoken of this year by several eminent floriculturists of this country, who saw them in bloom.

# ARTICLE IV.

## OBSERVATIONS UPON THUNBERGIA (?) FASTUOSA.

BY CH. J. OF MR. VAN HOUTTE'S NURSERY, GHENT.

THE inconvenience is vexatiously felt by most amateurs of being under the necessity of shading those plants which remain under glass during the summer season; their protections being mostly unsightly, formed of clownish and nasty canvass, laths, mats, &c. To avoid the disagreeable effect of such protections, the loss of time resulting from their arrangement in the morning and removing them in the evening, various climbers are planted to protect the plants under them from the sun, by the interlacing of their long leafy branches.

But no plant has, up to the present time, answered the above object; the Passion-flowers, the Bignonias, &c., grow slowly enough, or even languish; and besides too long a lapse of time (several years) would pass over, before the green or hot-houses would be properly furnished, or their branches be capable of casting the necessary shade.

At this moment the problem is completely resolved by experience.

A plant recently introduced from Mexico amply suffices for all the exigencies of amateurs. Its vegetation is of such extraordinary luxuriance that in a few months only (six or seven), its branches attain a length of more than 30 feet, without counting numerous side shoots, which reach nearly the same extension. The diameter of its leaves is more than six or eight inches, and they garnish the whole length of the shoots. Such a plant, put in full ground, in a corner of an ordinary hothouse, will easily cover all glazed surface in less than a year, and save the amateur from having to employ other means to protect his plants against the devouring influence of the sun's rays. Even during this first year pruning will be often necessary, in order to diminish the obscurity produced by the multiplicity of intermingled branches and of large leaves of our Thunbergia.

These few words will suffice to make the utility of the new plant we announce understood. We must say a word of the beauty of its habitus.

At this point of view, it fears little rivalry. Its cylindric branches, hollow within, as thick as a finger, are very glabrous, smooth, of a deep purple, very finely spotted with green. Its leaves are opposite, very ample, smooth, emarginate-cordiform, ovate, obliquely acuminate, five-nerved, denticulated-mucronate at the edges; both sides covered with numerous stomata. The nervation is finely reticulated. The young leaves are of a dark red, and appear pubescent; the petioles (young) form a sort of ring around the branch, and are abruptly defixed behind, as well as the buds contained in their axil. The shoots, freshly cut, shed a grave smell, indicating some quality, which it would be interesting to study, as being perhaps pharmaceutic.

We have not yet seen it in flower,' and cannot therefore affirm that it really belongs to the genus Thunbergia, of which, however, it certainly presents all the habitus. The fury of its vegetation has, without doubt, prevented it, up to the present time, from producing this agreeable result, which one must hope will be obtained by judicious pruning. As soon as we have seen these flowers, we shall hasten to have them figured, and to describe them conveniently. In the mean time, we can confidently recommend this being planted both in the hot or the greenhouse (indifferently); it will perfectly answer the purpose of which we have spoken.

## ARTICLE V.

### REMARKS ON THE PANKE. (GUNNERA SCABRA).

BY CH. J. OF MR. VAN HOUTTE'S NURSERY, GHENT.

When from the commencement of the 18th century, father Feuillée proclaimed the pharmaceutic, culinary, and economic qualities of a plant, the Panke, of which the Chilians made advantageous use under all these three points of view, he could not have imagined that his voice would not be heard, that his efforts would rest powerless. Is that not eventually the fate of all who have endeavoured to bless their fellow men with any useful invention? Was Solomon De Caux believed, James Watt, Fulton, and even Parmentier himself, the discoverer of the potatoe!

At length, more than 100 years ago since that voice was extinct which announced to Europeans the utility of the Chilian plant, thanks to the generous efforts of one of the principal horticulturists of the Continent, the Panke is finally introduced into Europe, and society may in future reap the same advantages from it as do the Chilians themselves.

The Panke (Gunnera Chilensis or scabra Auct.), though stemless, acquires very great dimensions. Its facies is that of a Rheum, with a more considerable development. No other plant is more proper to adorn the landscape or large flower-gardens.

From a very thick round rhizoma, formed with persistent vestiges of the old leaves, rise cylindric petioles embracing and dilated at the base, nearly the size of a child's arm, 1 or 1½ metre long, ordinarily purple, covered with short conic and herbaceous prickles. The foliaceous limb is not less than a metre in diameter, and palmatifid, five-lobed, five-nerved; each nerve is doubly dichotomous, each lobe bilobulate, with slightly acuminated coarsely duplicidentate segments. These two pages are scabrous, covered with scarce hairs, and, below particularly, along the nervures, the same prickles as on the petioles. The young leaves, before their entire development, are of beautiful reddish purple, which slowly disappears as they grow older. The floral scapes, hardly 35 to 40 centimetres high, are pyramidal and covered from half to summit with hermaphrodite flowers, which are sessile and little remarkable in themselves, but, however, of a pretty good effect by their mode of insertion.

The Gunnera scabra grows in humid places, in Peru and Chili; and according to travellers it is very refreshing. The natives drink a decoction of its leaves for that purpose; they also eat the thick petioles raw or cooked, after having pealed off the bark. Dyers cut the roots in little pieces, boil them, and thence extract a beautiful and solid black colour. Tanners soak their leathers in a water saturated with its juice, which thus acquire a thickness and pliancy that no other procedure would or can give it.

If one takes into consideration that the temperature of Chili and Peru is nearly identical with that of the climates of the centre and of the south of Europe, it is not unreasonable to suppose that the Gunnera scabra may easily be acclimated, and produce high results here. It is with this view that we publish this note; let us hope that both medicine and domestic economy may draw some advantage from it.

I BEG to forward, for insertion in the CABINET, a few remarks which have come under my notice, and a practice in Germany respecting grafting the varieties of Roses, but more particularly the Rosa odorata, or tea-scented. As this system is something different from what is described in the fifth volume of the CABINET, I thought it probably might be interesting to some portion of the readers of your useful Magazine. As this season of the year affords an opportunity and comfortable employment to those who are fond of experiments, and possess a few choice kinds of Roses, and are desirous of increasing their collection, but who may not be acquainted with this method, I will briefly state how it may be done. I should first state, however, that at this season of the year the system cannot be well performed by any but those who are in possession of a stove or vinery at work, nor even by them if they have not some of the commoner kinds of roses in pots to work the rarer sorts upon.

The first thing to be successful in this operation is to cause a quantity, as may be required, of suckers or layers of the purple Noisette, Boursault, China, or common Dog Rose, to be potted the previous winter or spring; let the pots be plunged in the earth in the open garden, watered when required, and all side shoots removed from the stems through the summer. In November, or before Christmas, the pots may be taken up and cleaned, the stocks headed down from twelve to thirty inches, as best suits the taste of the operator. They may then be placed under a greenhouse stage, shed, or frame, not in use, and be introduced to a warmer temperature for working when required. When prepared with cuttings of those sorts of Roses desired, which should be the growth of the previous year, some thin strips of matting, a little grafting wax, &c., and the stocks having been excited for ten days in a vinery or stove, the operation may be commenced. After placing a seat in a convenient part of the house, take the cuttings and, with a sharp knife, cut the scions to proper lengths, viz., two or three inches, according to the distance betwixt the buds, cutting them through at equal distances between the buds. When the sap in the stocks has begun to flow, which will be seen on removing a portion of the bark at the top, the scions may be inserted by cutting a slit about one inch long in the bark of the stock, commencing a few inches from the top, and then cutting horizontally across the top of the first incision, open the bark with a budding-knife, and pare on one side of the scion opposite the bud and about one inch below, to the form of a wedge, leaving the bark on the opposite side entire. After inserting the scion under the bark of the stock, tie round with a little matting, and cover the part with a mixture of pitch and bees-wax, and the work is complete. When the stocks are large, two or more scions may be inserted. The upper part of the scions, as well as the stocks, are left until the plants are established, which is generally in a few weeks, if the operation is rightly performed, when they are cut clean off, by allowing one or two inches of wood to remain on the scion above the bud, as well as a few inches on the stock above the grafted part. Chance of success is almost certain. To those who are interested in this art, and possessing the means, they may find the practice of the above method a very interesting employment during the severe weather of winter, besides furnishing their greenhouse stages with this lovely flower the ensuing season.

It may not be generally known that cuttings of Rosa odorata, and its numerous varieties, are much readier rooted in water than by any other method. When an increase of bushy plants are required, in the spring take off cuttings, place six or eight in a pot of water, having previously tied some paper over the top; the paper cover must have a proper number of small holes around the inside of the rim of the pot for the ends of the cuttings to be passed through, and a larger hole in the centre of the cover in order to supply water there. when the cuttings are thus fixed, plunge the pot to the rim in a hot-bed and shade from hot sun. In three weeks the cuttings may be planted out on a slight hot-bed in a sandy soil, at nine inches apart, watered, and shaded by means of whitewashing the glass at the under side of the sashes, and admitting air throughout the day. In autumn the plants may be potted, and will form neat specimens for flowering the following season.

## ARTICLE VII.

## ON THE CULTURE OF INDIAN (GREENHOUSE) AZALEAS.

BY A LONDON EXHIBITOR.

The splendid specimens which are exhibited in, and around London, of the Azalea indica, being much superior to any I have seen at the country shows, induces me to send the particulars of culture.

As soon as the plants have done flowering, if shifting is necessary, prepare some compost mould for them in the following proportions: two-thirds bog earth, one-third well decomposed tree-leaf mould, and one-twelfth sharp silver sand: they must not be sifted, but well chopped and broken with the spade; any lumps remaining may be broken with the hand. Having a pot a size larger than the one the plant to be shifted has been growing in, and washed clean inside and out, then proceed to pot the plant, taking care the drainage is well attended to, for upon this depends in a very great measure the success of the plant. In potting, I think it an advantage to place the centre of the ball rather lower than the mould at the outside of the pot, and form as it were a little basin inside, as by this means the whole mass of roots is benefited by the water given from time to time; and if the drainage is effectually performed, the water will pass through as freely and quickly as when the plant is potted high in the pot. The plants being potted, place them in the stove, where attention must be paid to watering when necessary. They will be very much benefited by being syringed all over at least once a day; and in sunny days they will require to be syringed three or four times each day. With this treatment they will grow amazingly, and in the course of six or eight weeks will have made shoots from three to nine inches in length. They must be kept in the stove till the flower-buds for the ensuing year have attained the size of a small pea, which can easily be ascertained by feeling the ends of the shoots; they should then be placed in the greenhouse for ten days or a fortnight to harden, when, if the weather is suitable, they may be placed out of doors in a cool airy situation, till the time for taking in the general stock of greenhouse plants.

Where the plants have bloomed so profusely as almost to exhaust them, tie some moss round the principal stems, and keep it constantly moist; this will cause them to break regularly and grow freely.

Where there is not the convenience of a stove, I would recommend that the plants be kept in the greenhouse till the buds are well set; and should this happen so late that there are but two or three weeks for them to have the advantage of the open air, still setting them out will be found highly serviceable.

If the foregoing particulars are attended to, the evil spoken of at page 215 of the sixth volume of the FLORICULTURAL CABINET will be of very rare occurrence, for the roots are emitted in such abundance as completely to fill the pots; and instead of being liable to perish from over-watering, it will be almost impossible to give them enough, the close mass of thirsty roots absorbing an almost incredible quantity of moisture. Treated as above described, all the species and varieties of this splendid tribe will answer the most sanguine wishes and expectations of the cultivator; and I think it is impossible to bloom some of the sorts properly, as Phœnicea, Smithii, and others, under any other mode of treatment:—instead of producing here and there a flower, as is commonly the case, the Phœnicea will be one entire mass of bloom, expanding its brilliant purple flowers from two and a half to three inches across, and commanding the admiration of all who behold it.

Where it is required, and the stock of plants is sufficient, the blooming season may be protracted from September till June.

## ARTICLE VIII.

### ON RAISING MIGNONETTE FROM CUTTINGS,

BY A PRACTICAL LADY AMATEUR.

BEING very short of Mignonette this year, though I had sown a quantity, I was induced this July to try the experiment of a few cuttings in transplanting, from the border to some boxes. I have had the pleasure to see the cuttings thrive equally as well as the plants with roots. The Mignonette was sown in an open border, and the boxes the cuttings were put into were at a window with a north aspect. As soon as the state of the ground will allow of it, I purpose to repeat the experiment in the open border.

## ARTICLE IX.

## REMARKS ON CLIANTHUS PUNICEUS, GROWN AS A STANDARD PLANT.

BY A FLOWER GARDENER.

THE Clianthus Puniceus is well worthy of a place in every collection, both for its beautiful foliage and pendant racemes of red flowers. When grown as a standard, it far surpasses in beauty and elegance any plant I have seen of its kind; I shall mention a few words regarding its culture as a standard. Select cuttings from a plant about the beginning of May or June; the cuttings should not exceed four inches in length, and taken from the same year's growth; recollect that the extremity or point of the cuttings must not be pinched off. After making the cuttings, allow them to remain for a day or two before potting, to dry some of the superabundant moisture from them, which is an advantage gained by the cuttings rooting two days sooner. A 32-sized pot should be filled with white sand, and the cuttings inserted therein to the depth of two or more inches; they will strike readily in a heat of 70 or 75 degrees; if they are covered with a bell-glass the strike will be more successful. After struck, they should be potted off separately, in thumbs or small sixties, amongst a compost of sand, leaf, loam, with a little well-decomposed cow-dung, all well incorporated together. When potted, they should be placed in a bottom heat till they have matured roots enough to support themselves. Then they should be removed to a more airy situation, either to a greenhouse or conservatory, and great care and attention must be paid to the repotting and watering, for without the plants will soon form a sickly, stinted appearance. To make good standards, all side-shoots must be pinched off as soon as they appear, training the plant up with a clear stem to the necessary height required. Then, after they have attained the required height, the tops should be pinched off; and that causes them to throw out laterals, and these laterals again stopped, make them still to throw out the more, till at last the plants attain a most luxuriant head, richly decorated with thick but dense pale green foliage. When treated after the method that I have laid down above, then planted out in a conservatory, amongst good rich mould, one-half fresh loam, one quarter leaf mould, and one-quarter decomposed cow-dung, along with a little vegetable mould and sand; all these to be well incorporated together, and a pit made for the reception of the plants, three feet square by two and a half deep, filling it up with the above composts; then insert the plant, putting it about an inch deeper than it was in the pot; then there should be a stake of durable wood procured to fasten it to. When planted out, it grows more luxuriant than in pots, and has always a more healthy appearance. When in flower, what can surpass it? The bunches of pale red flowers hanging the one upon the other, out of a dense thicket, as it may be termed.

# PART II.

## LIST OF NEW AND RARE PLANTS.

**CALLIANDRA TWEEDIEI.** Mr. TWEEDIE'S. (Bot. Mag. 4188.) Leguminosæ. Monadelphia Polyandria. This is a very beautiful flowering Mimosæ-like plant; it is a native of South Brazil, where it was found by Mr. Sellow. Mr. Jennings, gardener to the Earl of Derby, at Knowsley Park, raised plants of it from seeds, where it has also bloomed, as well as at the Royal Gardens at Kew. It requires to be grown in a moist stove temperature. In its native country it grows to a small tree in good soil; but in the mountainous places a low shrub. The foliage is of the beautiful Mimosæ form. The flowers are produced in heads of about twenty in each. The fine crimson-red filaments give a very pretty appearance, much like those of the Inga pulcherrima.

**TACSONIA MOLLISSIMA.** DOWNY-LEAVED. (Bot. Mag. 4187.) Passifloreæ. Monadelphia Pentandria. A native of New Grenada, yet growing at a height of 10,000 feet above the level of the sea. Mr. Lobb sent seeds of it to Messrs. Veitch, of Exeter Nursery, where it has been raised. It blooms freely in a cool greenhouse, and it is very likely to bloom well in the open air in Devonshire, trained against a good aspected wall. As a conservatory climber it is very beautiful. The flower has a tube five inches long, green. The petals are of a beautiful rose colour. Each flower about four inches across.

**FRANCISCEA ACUMINATA.** ACUMINATED-LEAVED. (Bot. Mag. 4189.) Scrophularinæ. Didynamia Angiospermia. A shrubby plant, a native of Brazil, received into this country by the name of F. Pohliana. It is a very handsome stove plant. The flowers are about the size of F. Hopeana, produced in terminal clusters on short branches. The corolla is of a rich deep purple, having a white ring around the eye of the tube; as the flowers become older, they become of a pale purple. It is a very pretty species.

**SCHOMBURGKIA UNDULATA.** WAVY-FLOWERED. (Bot. Reg. 53.) Orchidaceæ. Gynandria Monandria. Discovered by Mr. Linden in New Granada. The flowers are produced in a head of about twenty in each. The sepals and petals are a chocolate-brown colour. The labellum is a bright rosy crimson. Each flower is two inches and a-half across.

**HABRANTHUS CONCOLOR.** WHOLE-COLOURED. (Bot. Reg. 54.) Amaryllidaceæ. Hexandria Monogynia. Mr. Hartweg found it in pastures near the city of Leon in Mexico. The flowers are a pale green, each being about three inches long and nearly as much across. It flourishes either in the greenhouse or cold frame.

**GONGORA TRUNCATA.** BEAN-BUDDED. (Bot. Reg. 56.) From Mexico, and is in the collection of S. Rucker, Esq., of Wandsworth. Sepals and petals cream colour, brown, and green, with small streaks of rose. Lip yellow, with white tip. Each blossom is about an inch and a-half across. They are numerously produced in large panicles.

**Boldoa fragrans. Sweet-scented.** (Bot. Reg. 57.) Monomiaceæ. Gynandria Monandria. A greenhouse shrub from Chili, where it is much valued. The aromatic fruit is eaten by the natives. It is about as large as a haw. It there grows to a tree about ten yards high. The foliage and flowers are highly aromatic. The blossoms are of a pale greenish white, in smallish terminal panicles, and about half an inch across. It is in the collection at the garden of the London Horticultural Society.

**Aerides maculosum. Spotted Air-plant.** (Bot. Reg. 58.) Orchidaceæ. Gynandria Monandria. The flowers are produced in dense panicles. Each flower is about an inch across, petals and sepals flesh colour, spotted with dark crimson. Lip a rose crimson, having a broad margin of flesh colour. It is a very beautiful species, growing in Messrs. Rollisson's collection at Tooting.

**Odontoglossum Cervantesii. Cervantes' Tooth-tongue.** (Pax. Mag. Bot.) Orchidaceæ. Gynandria Monandria. Messrs. Loddiges received it from Oaxaca. The flowers are white, with a pink-coloured margin. A portion of the lower part of each petal is streaked with black, giving the flower a dark circular eye. A separate blossom is nearly three inches across. Lip is very small bright golden yellow, marked with crimson.

**Spirea Douglassii. Mr. Douglas's Spiræa.** (Pax. Mag. Bot.) Spiræacea. Icosandria Di-Pentagynia. It was first discovered by the late Mr. Douglas on the north-west coast of America, about Columbia, but was not sent to this country by him. Dr. Tolmie sent some seeds, which he gathered at Fort Vancouver, to the Glasgow Botanic Garden, where the plant has bloomed. It forms a handsome shrub, much like the well-known S. tomentosa, rising to about four feet high. The flowers are produced in crowded panicled spikes, of a beautiful rosy lilac. It blooms from June to November, and well merits a place in the shrubbery.

**Mussænda macrophylla. The Broad-leaved.** (Pax. Mag. Bot.) Cinchonacæa. Pentandria Monogynia. From Nepal. An evergreen, upright spreading shrub, growing in the conservatory to about six feet high. It flourishes with a similar treatment to Luculia gratissima. The flowers are produced in terminal corymbous heads. Each blossom has a tube about an inch and a half long, green; calyx green; petals five, of a rich orange-red colour. The flower is about three-quarters of an inch across.

# PART III.

## MISCELLANEOUS INTELLIGENCE.

### QUERIES.

**On a List of Pelargoniums, &c.**—You will greatly oblige several of your original subscribers in this neighbourhood by giving a list of a few of the best new Pelargoniums and Calceolarias; I mean such kinds only that if added to our collections will be really acquisitions.

Sheffield, June 2, 1845. Felix.

We recommend our querists to peruse the accounts as they will appear in the Cabinet of the Metropolitan Exhibitions, and in them from time to time will be found the names of all the flowers in prize collections; in the mean time the following may safely be added :—

*Pelargoniums.*—Achilles, Ackbar, Roulette (Garth), Zanzummin (Beck), Mabel, Favorita (Beck), Duke of Cornwall (Lyne), Sir R. Peel (Foster). Pulchellum (Foster), Neptune, Hermione, Coquette, Albert Prince of Wales, Oberon, Mojub, Princeps, Mrs. Sterling, Alice Gray, Bella (Beck) ; and amongst the new ones coming out for the first time next spring we recommend Aurora (Beck) Desdemona (Beck), Othello (Beck), Mustee (Beck), Arabella (Beck), Sunset, Heidos (Hoyle), Standard of Perfection (Grady), Miss Halford (Gaines), Rosy Circle (Beck), Emperor Nicholas, Merry Monarch (Staines), Prince Alfred (Gaines), Vesta (Gaines), Formosissima (Gaines), and Phantom (Gaines).

*Calceolarias.*—Prince Albert (Green), Jamie Forrest, Lady Constable, Magician, King of Saxony, Mary Queen of Scots, General Robertson, Emperor of Russia, Lady Vernon (Holmes), Prince Alfred, Lady Ann Charteris, Rosea grandiflora; and of the kinds coming out next spring, Lacerata (Garrod), Madonna (Gaines), Louis Philippe (Gaines), Novelty (Gaines), No. 318 (Gaines), Climax (Gaines), London Rival (Holmes), and Emperor (Standish).

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ON HYBRID PERPETUAL ROSES.—A Beginner will be obliged by having a list of twelve of the best Perpetual Roses, dwarfs, for a small flower garden.

Clementine Duval; bright rose, brilliant.
Duc d'Aumale; bright pink, fine.
Duchess of Sutherland (Laffy); bright rose, mottled.
Madame Laffy; brilliant rosy-crimson, superb.
Rivers (Laffy's); red, tinged with lilac, superb.
William Jesse; light crimson, lilac tinge, beautiful.
Aubornon; brilliant crimson, superb, very fragrant.
Clementine Seringe; beautiful rose, very fragrant.
Comte d'Eu; crimson-scarlet, very brilliant.
Dr. Marjolin; deep carmine, superb.
Mrs. Elliott; light lilac-crimson, fine.
Reine de la Guillotiere; brilliant crimson, very superb.

The above are splendid in flower, and bloom from the beginning of June till November, deserving a place wherever fine Roses are desired at the time specified.—CONDUCTOR.

## REMARKS.

ON GLASS AND GLAZING.—The following remarks on the above-named subjects, by the editor of the "Gardeners' Chronicle," I extract from that paper, and should be glad of their insertion in the November CABINET; it will be useful to persons about to construct houses the coming winter. A.

*Glass.*—If "A Country Gentleman" or "F. G. H." will be so good as to consult our advertising columns, they will see that the dealers in foreign glass are Mr. Elphick and Mr. Rahn. He should apply to them. We are sure that his gardener will be glad to learn the use of the diamond, and to be his own glazier in small matters, until the glazier by trade shall come to his senses. The attempt, on the part of the country glaziers and others, to charge the old prices for glass is a most impudent attempt at extortion, and should be effectually put a stop to. They are of opinion that country gentlemen are helpless. As to "F. G. H." being puzzled with glass-cutters' figures, we are not surprised at it; the figures are well suited to puzzle anybody; but we cannot occupy more time in exposing that system. The foreign glass trade has nothing to do with such devices, and does not dream of charging more and more for any few inches of additional size; that is a mere glass-cutters' trick, which we long ago exposed, to the infinite annoyance of our glass-cutting friends.—"J. M." Good foreign sheet-glass is not more blistered than other sheet-glass, all of which has some defects, unless of very superior quality, and it is quite good enough for all common glazing purposes. There is, however, a good deal of difference in the quality of foreign glass, and some is said to be very bad; but we have not seen any such. If you want glass as true as plate-glass, then you must go to the home market, and pay English prices. As to the price of English glass, that depends upon your skill as a buyer. In your purchase go to the glass *makers* themselves, and not glass *cutters* and retail dealers; if you cannot make a good bargain with the sellers, why go without their material, which will be much cheaper by another season.

The larger your squares the better they will look; but it is not safe to employ squares wider than a foot if your sashes are to be lifted about, for they will be apt to wring and break the panes.—" T. H." The statement which you have investigated was not ours, but that of a correspondent. You see that the statement is true, although we were mistaken in the inference we drew from it. You also see what the glass trade is. If the manufacturers are so ill-advised as to persevere in playing into the hands of glass cutters and dealers, who are their worst enemies, it is of no consequence to anybody but themselves. We can procure foreign glass of as good quality as theirs without any trouble, and they may say farewell, a long farewell, to their trade, which is already moving rapidly to the Elbe and the Scheldt.

*Glazing.*—" F. P." We feel your difficulty. Buy and cut your glass, and give your glazier 1½*d.* a foot for putting it in, he finding putty, and leaving it in a workmanlike state: and if he will not, buy putty and do it yourself. Do not be imposed upon by the country glaziers. The allowance is ample.

PROPERTIES OF THE CARNATION AND PICOTEE, as now universally recognised among the first cultivators of the day, and at the principal floral societies:—

*Carnation.*—General Form and Size.—Round outline as seen in front, formed by the guard petals, and those having perfectly smooth edges; half round as looked at in profile, formed by a regularly rising face and crown. The perfection of size two and a-half to three inches.

Texture.—Thickness of petals and richness of surface are absolutely necessary to secure the advantage of whichever colour may be present.

Colour and Character.—Ground pure white; every spot, or shade, or stain is a blemish. Stripes to be broad, whole, and well defined at the edges, and, whatever shade they may be, dense and perfect throughout. In bizarres, the whole of the light and dark to be equal in width and quantity. In flakes, twice as much colour as white, and in complete stripes.

Symmetry.—The petals should be slightly cupped, as it gives great strength and reflects the colour, and lay in well-arranged circular tiers, one row above another, and each petal covering the place where the lower petals meet. Each row should be sufficiently shorter than the under one to expose a good portion of the surface, and form the half ball. Not less than nineteen petals will do this properly, supposing them even wide enough to make five form each row or circle.

*Picotee.*—Form, Texture, Size, and Symmetry.—The same as the Carnation.

Colour and Character.—The colour should be whole at the outer edges, and whether heavy or light—that is, broad or narrow—form a delicate feather on the inner edge. The ground pure white, any spot, or bar, or stain, or shade, except the edging, being a decided blemish.

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HYACINTHS IN GLASSES.—When water is to be renewed always have it about new milk warm when put in the glass. The application of cold water damages the tender roots, and causes the tips to rot. FLORA.

SCALE.—The following is a sure, simple, and easy method of cleaning plants infected with scale: Take a handful of gum arabic, and dissolve it in as much water as will thicken it to the consistency of oil; then take a small painter's brush (if a new one so much the better) and commence at the top of the plant, and paint both leaves and stem, with the dissolved gum, down to the soil. The plant may then be removed to its proper place for a week or two, at the expiration of that time it must be taken and washed with soft water, using a sponge, or, what is still better, an old tooth-brush, to remove the gum that may adhere to the plant; after the washing is finished, if carefully done, the plant will be completely cleansed from scale. I have done plants so infected, that I never had any hopes of ever cleaning them, and now there is not a scale to be found upon them, and the plants have a fine bright glossy appearance.

Leeds. F. G. A.

ON THE DOUBLE RED FLOWERED CURRANT, &c.—As you desire information on the subject of new plants, and as I have not observed anything on the following in the CABINET, I forward the particulars of them for insertion in the next number.

*The Double Red Currant.*—I observed mention made of a semi-double Currant in the "Gardeners' Chronicle" some time since, and, happening to mention this to a nurseryman in Scotland, he gave me the following particulars:—"Mr. M'Nab, of the Edinburgh Botanical Gardens, having gone to see some garden in the neighbourhood, was asked by the gardener to look at a curious currant, which he discovered growing among some rubbish; upon examination, Mr. M'Nab found this to be a double flowering Red Currant, and immediately asked for plants of it." This currant is perfectly double, and a size larger than the common red flowering one (Ribes sanguinea). I believe Mr. M'Nab was selling plants this spring at 10*s.* 6*d.* each.

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NEW NEMOPHILA.—When I was at Kenmore this summer, Mr. Murray, gardener to the Marquis of ———— showed me a pure white Nemophila which he had raised; it was a variety of N. insignis, but rather larger. When in Scotland I observed several Pansies that I thought particularly fine, which are not in the English catalogues; among them were Finlayson's Laird o' Logan; a white ground, blue purple top petals, and a broad blue margin; eye very dark and rich; size, shape, and substance, extra. Also, Campbell's Rob Roy; a white ground, blue top petals, and middle-sized margin, which is very regular; extra eye, shape, size, and substance. This, by some, was considered the best pansy in Scotland at the time. A few others are Campbell's Prince Charlie, Carnagie's Queen of the Isles, Lady Lorn, and Pearson's Prince Albert, a bright yellow ground, maroon purple top petals, and regular margin; eye, size, and shape, extra.

Ballykilbeg House, Downpatrick. WILLIAM JOHNSTON.

[We very respectfully thank our correspondent for the descriptive remarks on the particular flowers; we shall be glad of more. We hope other readers of our Magazine will also assist us in this respect.—CONDUCTOR.]

A LIST OF AURICULAS.—In a recent Number of the CABINET, I noticed a correspondent asks for a list of some of the best Auriculas of each class, the following I know to be of first rate quality.

*Green Edged.*

Dickson's Matilda.
Page's Champion.
Lee's Colonel Taylor.
Booth's Freedom.
Pollett's Highland Boy.
Stretche's Emperor Alexander.
Smith's Waterloo.
Hudson's Apollo.
Dickson's Earl of Errol.
Dickson's Duke of Wellington.
Dickson's Prince Albert.
Lightbody's Lord Lynedoch.

*Grey Edged.*

Fletcher's Ne plus ultra.
Waterhouse's Conqueror of Europe.
Dickson's Unique.
Oliver's Lovely Anne.
Kenyon's Ringleader.
Syke's Complete.
Hedge's Britannia.
Gaines's Privateer.
Maclean's Unique.
Fletcher's Mary Anne.
Dickson's Duke of Sussex.

*White Edged.*

Taylor's Glory.
Taylor's Incomparable.
Popplewell's Conqueror.
Thorpe's Magpie.

*Self Coloured.*

Redman's Metropolitan.
Netherwood's Othello.
Dickson's Apollo.
Bury's Lord Primate.

**On Climbing Roses suited for shady situations.**—In reply to Mrs. M—le, the following will succeed admirably where no other kinds will long exist. They can be had at from 6*d.* to 1*s.* each.

| | |
|---|---|
| Alice Gray | fine creamy salmon blush. |
| Countess of Lieven | shaded white, cupped. |
| Dundee Rambler | white, with pink edge. |
| Myrrh-scented | fine creamy blush, very peculiar scent. |
| Queen of the Belgians | pure white, cupped and double. |
| Rose Angle | fine creamy pink, highly scented. |
| Ruga | large pale flesh, very fragrant. |
| Splendens | shaded white, globular and very double. |
| Variegated | single white, with variegated foliage. |

The kinds of Moss Roses have recently been much improved. The following is a selection of the best.

| | |
|---|---|
| A Feuilles d'agathe | pale flesh, in large clusters. |
| ———— luisantes | rosy blush, very double. |
| ———— pourpres | fine dark red. |
| Alice Leroy | light rosy pink, fine. |
| Angelique | deep rose. |
| Asepala | pale rose, curious. |
| Blush (new) | pale blush, very fine. |
| Brilliant (Lee's) | bright pink. |
| Celina | brilliant crimson, splendid. |
| Charlotte Defor | bright rose. |
| Common | large rose. |
| Comtesse de Murinais | white, in large clusters. |
| Crimson, or Damask | bright carmine, fine. |
| De Colmar. | |
| De la Flèche, or Scarlet | fine purplish crimson. |
| De Metz | deep rose colour. |
| De Vieillard | delicate rose, very double. |
| Diâne de Colmar. | |
| Ecarlate | fine bright rose. |
| Eclatante | brilliant rose, cupped. |
| Emperor. | |
| Ferrugineuse plena nova | vivid red. |
| Globuleuse | fine light crimson shaded. |
| Grandiflora | fine veined rose, large. |
| Helène Maugét | bright rose. |
| Hooker's Blush | blush, with rosy centre. |
| Hortensia | fine reddish lilac. |
| Josephine | lake, superb. |
| Juliana | rosy pink, semi-double. |
| Lançel | fine crimson, very mossy. |
| Lanzezeur | deep rose, striped with lilac. |
| Le Vésuve | crimson, shaded with purple. |
| Louise Colét | pale rose, cupped. |
| Malvina | fine rosy lilac, slightly spotted. |
| Marbrée | marbled rose. |
| Maugét | superb bright red. |
| Mottled (Peacocks') or Prolifère, | fine rose |
| Mousseuse partout, or Zoe | rose, leaves mossy. |
| ———— presque partout | fine rose, leaves partially mossed. |
| Mrs. Wood | bright purplish crimson. |
| Nivea | pure white. |
| Oscar Foulard | fine dark crimson. |
| Panaché pleine | French white with rosy stripes. |
| Perpétuelle (Maugét) | deep rosy crimson. |
| Picciola | rosy flesh colour. |
| Pompone, or De Meaux | pale blush, very pretty. |

| | |
|---|---|
| Pompone feu | small deep purplish crimson. |
| Ponctué nouvelle | bright pink, spotted. |
| Pourpre de Laffay | purplish crimson. |
| | fine deep rose. |
| Princesse Adelaide | delicate rose, flowering in large clusters splendid. |
| Princess Royal | dark purplish crimson. |
| Prolific | fine rose, large. |
| Renoncule pourpre | maroon purple. |
| *Rouge Foncé* | deep red. |
| *Rosinella* | purplish crimson. |
| Rouge du Luxembourg | deep crimson. |
| Sage-leaved | bright rose colour. |
| Sanguine | superb dark crimson. |
| Single (Rivers') | bright single crimson. |
| - Lilac | distinct, curious. |
| Splendens | fine pink, large. |
| Spotted, or ponctué | carmine, spotted. |
| Striped, or panaché | pale flesh colour. |
| Unique de Provence | large, pure white, fine. |
| Velour pourpre | light crimson, very double. |
| Vimorin | large, deep pink. |
| White Bath | fine white, sometimes striped. |
| ——— French | very fine flesh colour, nearly white. |

On Budding Rhododendrons.—In order to insure success, August or September is the best time for budding or grafting Rhododendrons in the open air. This plant, being thin-rinded, does best by side-grafting, and buds of it had also better be inserted after the manner of side-grafting, with a portion of the soft wood retained behind the bud. (See Article in a recent Number.)

Lachenalias.—The very beautiful Lachenalias are plants that well deserve to be grown in the greenhouse; their varied colours, lovely pendant flowers, render them peculiarly interesting. To induce their more general culture, I give the mode of treatment I have most successfully practised. The bulbs which are not large should be potted in September, three in a pot. The soil should be a mixture of peat and sand, about three parts of the former to one of the latter, with a small quantity of leaf-mould. Select good sound bulbs for flowering, and pot the small offsets by themselves. The pots should be well drained, and after the bulbs are planted remove them to a frame where they will have light, and not be exposed to the cold autumn rains. Keep them in this situation until November, or when the nights become quite frosty, giving just sufficient water to keep the earth moist. At that time they may be removed to the parlour or greenhouse, placing them in a light situation, and watering them cautiously until they begin to grow. In February the flower-stems will appear, when more water should be given, though with care; the flower-stems will now shoot up, and in the course of a few weeks will be beautifully in bloom, remaining so for two or three weeks, or much longer, if they are kept in a partially shaded place. In May, when the foliage begins to turn yellow, the pots may be removed to the open air for a few weeks, when the bulbs should be taken out of the pots and laid away in a dry, cool place, until wanted for planting again in the autumn.

## LONDON HORTICULTURAL SOCIETY.

October 7.—At this meeting several articles well worthy of attention were produced. Messrs. Henderson, of Pineapple-place, sent a collection of plants remarkable for the beauty of their foliage; among them was a plant named Ruellia maculata, whose leaves are finely overlaid with silvery markings equal in beauty to that of the foliage of some tropical Orchids. The plant is quite new, and the beauty of its leaves alone will render it worthy of a place in every collection. In the same group were Dioscorea discolor, remarkable for its grey-looking velvety leaves; Tillandsia zebrina, with dull brown gilt leaves; the well-known Crotons pictum and variegatum; Dracæna terminalis, distinguished for its dark red foliage; Arundo Donax, variegata; Aspidistra lurida variegata, Begonia zebrina, and a cut specimen of a white species of Clerodendron, a beautiful stove twiner, and apparently a rapid grower, sent from Sierra Leone, by Mr. Whitfield. A large silver medal was awarded for the Ruellia maculata. —From the gardens at Syon, were Ruellia macrophylla, a brilliant scarlet flowered species; a remarkable cut specimen of Elate sylvestris, one of those noble Palm trees, which can only be grown in large conservatories. The plant possesses little beauty in its flowers, but produces panicles bearing multitudes of pretty oblong orange-coloured berries, with a curious flat stem, differing much from the usual structure. From the same collection was also fruit of the Constantinople Nut, Corylus Colurna, which forms a small tree and does not often produce nuts in this country. The kernel is small, in a very hard shell, which is again covered by a thick fleshy very remarkable husk. Along with these was a cut specimen of a Neptunia, from Jamaica, whose long stems floating on the surface of the water send up numerous laterals bearing multitudes of small balls of yellow flowers; the foliage is as irritable as that of the Sensitive plant; a coarse sort of rice paper is prepared from thin slices of the pith of a plant of similar habit. A Banksian medal was awarded for the two first-mentioned plants.—Mr. Glendinning, of the Chiswick Nursery, sent Statice purpurata, a pretty species, having some resemblance to S. Dickinsonii; and Mr. M'Ewen, gardener to Colonel Wyndham, sent Satyrium carneum, a pretty terrestrial Cape Orchid, having a dense spike of pink flowers, which were, however, very much bruised in the carriage, which detracted considerably from its beauty. The plant was in excellent health, and amply proved that, with a little care, such things may be successfully cultivated in this country, where their beautiful flowers and singular forms would amply repay the trouble.—From Mr. Robertson, gardener to Mrs. Lawrence, were Oncidium Harrisonianum, a fine specimen, richly studded with brownish-yellow blossoms; Lælia Lawrenciana; a good Saccolabium papillosum, one of the early importations from China; and a group of cut flowers, composed of Cattleya guttata, Brassia brachiata, and Dendrobium Chrysanthum, whose bright orange blossoms contrasted well with those of the other two. A Banksian medal was awarded for these plants.—Other Orchids were produced by Mr. Redding, gardener to Mrs. Marryatt. In this group were two fine plants of Zygopetalum maxillare, the old Stanhopea grandiflora, a very pretty Odontoglossum grande, and the handsome Cattleya Loddigesii; also a Begonia; the old Guzmannia tricolor, a Pine-like plant, with a dense spike of bright red flowers, seldom met with in collections; and a basket of cut blooms, chiefly of Tacsonia pinnatistipula. A Banksian medal was awarded for the Zygopetalum and Odontoglossum.—Of florists' flowers, Mr. Kendall, of Stoke Newington, sent two seedling Fuchsias, named the Great Britain, and Miss Prettyman, and a cut branch of F. Gigantea.—Mr. Ivery, of Peckham, also exhibited a seedling Verbena, named Wonder of Scarlets, and Mr. Fairbairn, of Wandsworth-road, sent a seedling Dahlia, named King of Perpetuals, with a seedling Polygala named Dalmaisiana.—From Messrs. Veitch and Son, of Exeter, was a Philibertia, sent by Mr. W. Lobb, from Peru. It is a greenhouse twiner, with pretty saucer-shaped flowers, which are said to be highly fragrant. Along with this was a Cymbidium, collected by Mr. T. Lobb, in Java, which, if not the same as Lancifolium, is very nearly related to it. A certificate was awarded for the Philibertia.—Messrs. Mountjoy and Son, of Ealing, produced Liatris squarrosa, a hardy North American plant, with Centaurea-like flowers, and Tacsonia mollissima, which is one of the best of the recent additions to this tribe; the flowers are smaller than those of the old Tacsonia, but their deficiency in this respect is made up in brilliancy of colour, which is much darker than that of the old T. pinnatistipula.—Mr. Ayres, gardener to J. Cook, Esq., sent blooms of an Ipomœa, from Ceylon, named Variegata, but which appeared to be the old I. Nil.—From D. D. Alves, Esq., was a Turk's Head Cactus, which had just been received from Jamaica.

## FLORICULTURAL CALENDAR FOR NOVEMBER.

All greenhouse plants should have a free supply of air admitted, except when it is frosty. The plants should not be watered in the evening, but in the early part of the day, so that the damps may be dried up before the house is closed, as they are, during the night, prejudicial to the plants. The soil in the pots should frequently be loosed at the surface to prevent its forming a mossy or very compact state. The plants must not be watered overhead. Luculia gratissima is the finest ornament for the greenhouse and conservatory, now and through the winter.

The plants of the Cactus that have been kept in the open air during the summer may be brought to bloom successively by taking such as are desired to bloom immediately into the heat of a forcing pine-house. Other plants, to bloom afterwards, should be kept in a greenhouse protected from the frost.

Plants of the Calceolaria that have been grown in the open borders during the summer months, and now taken up and potted, should be kept in a cool frame, or cool part of the greenhouse, being careful not to give too much water: just sufficient to keep the soil moist will only be necessary. Offsets will be found rooted; take them off and pot them.

Dutch bulbs, &c., may be successfully planted this month. See articles on best mode of the culture of each, in former numbers of the CABINET. Many persons who take a delight in growing some showy Hyacinths or other bulbous plants for adorning a room or window, &c., in winter or early in spring, have been frequently disappointed by the abortiveness of some and weakness of others. This principally arises from the inability of the plant to develop itself with a rapidity equal to the quantity of moisture it imbibes, on account of its upper surface being acted upon too immediately by the atmosphere, &c.; hence arises the necessity of covering the bulb. That such is a fact is evidenced by the admirable and certain success of nearly every bulb, especially Hyacinths, that is covered with about six inches of old spent bark. This or some similar light material should alway be used. Even bulbs intended to bloom in glasses we prefer starting in the old bark, and then transferring them to the glasses when the shoots are about two inches long. Where such covering is not adopted, it is of advantage to have the pots or glasses kept in a dark place till the shoots are two or three inches long.

Plants of some of the Chrysanthemums that are grown in pots and taken into the greenhouse will be found to have pushed a number of suckers. If the offset are wanted for the increase of the kind, it is advisable to pinch off the tops, so as to prevent their exhausting the plant to the weakening of the flower. If the flower-buds are thinned out freely it conduces to the increased size of those left. If the offsets are not wanted, it is best to pull up the suckers entire. Attention will be required to watering, as the roots absorb much if given: give manure water occasionally. If the plant is allowed to wither, it checks the flowers, whether in bud or expanded. So much do we admire this handsome genus of flowers, that we are fully persuaded their beautiful blossoms, exhibited in form and colour, will most amply repay for any labour that may be bestowed on the plants.

Dahlia seeds are best retained in the heads as grown, spread singly where they will not be liable to mould, and kept in a dry but not too hot a situation; being thus kept in the chaff, the small seeds will not shrivel, but be kept plump. The roots must be dried well before being put away, or will be liable to rot.

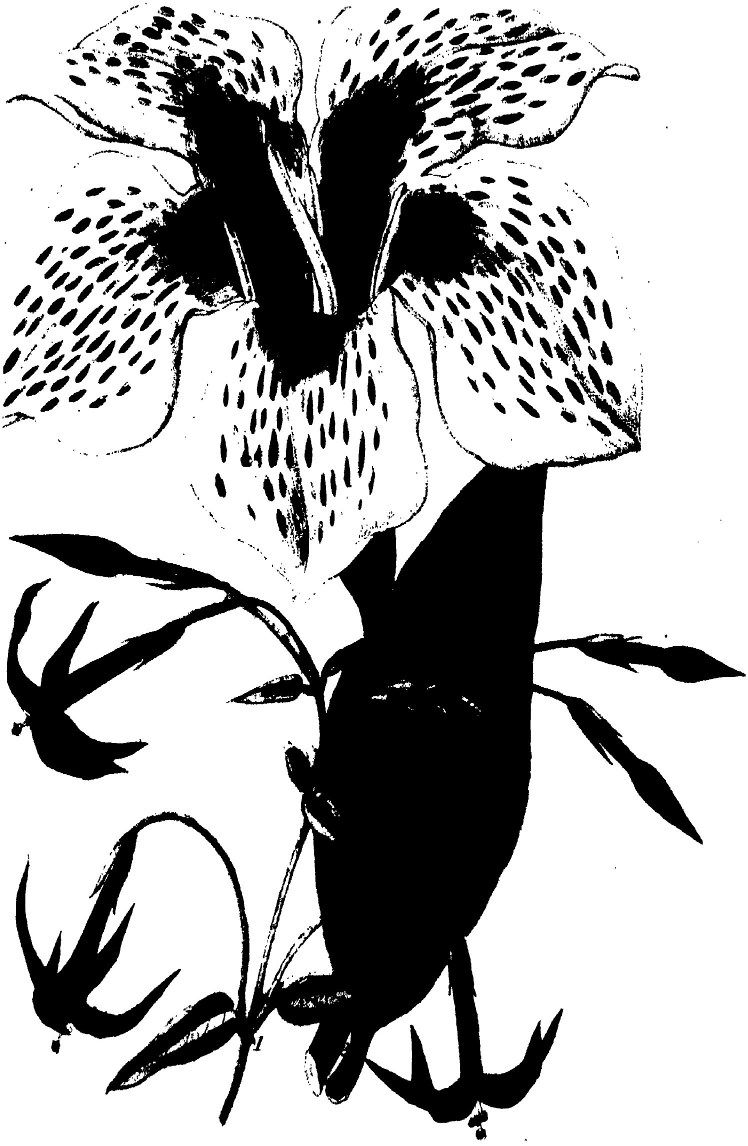
Fuchsias and greenhouse plants, intended to be inured to the open air, will require to have protection at the roots, and probably, for the first winter, over the tops too, by furze branches, canvass, wicker-baskets, &c.

Tubers of Commellinas, and bulbs of Tigridias, should be taken up and preserved dry through winter.

Shrubs, deciduous or evergreen, may now be successfully planted. If in exposed situations they should be secured to stakes.

Herbaceous border plants may still be divided and re-planted.

Roses, Persian Lilacs, &c., for forcing, should now be gently forwarded, if required for bloom by Christmas. Straw or reed hurdles ought now to be prepared for covering frames, &c., in the depth of winter.



1. LISIANTHUS NIGRESCENS.      2. GARDENIA STANLEYANA.

THE

# FLORICULTURAL CABINET,

DECEMBER 1st, 1845.

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# PART I.

## EMBELLISHMENTS.

## ARTICLE I.

### 1. GARDENIA STANLEYANA.—(Lord Derby's Gardenia.)

This very fine stove-shrub is a native of Sierra Leone, from whence it was sent by Mr. Whitfield to the Earl of Derby. A flowering specimen was sent from Kew, and exhibited at the Horticultural Society's Rooms, Regent-street, London, during the past summer, and which we saw at Kew. Sir W. J. Hooker observes, "The young plant presented to us, when yet only a few months old, but placed on the table of a stove heated below by the tank system, threw out flower-buds from most of the dichotomies of its young horizontal branches; and, in the month of March, 1845, no fewer than ten of the noble flowers were expanded at a time." The plant, two years old, is now about five feet high, shrubby, having a central stem throwing out horizontal branches on all sides, and a spreading top. The flowers are produced numerously, rising in an erect position above the foliage, and are exhibited to full view. They are not only very handsome, but are powerfully fragrant. The plant is of easy culture, and, from what we see of its easy growth, we have no doubt but it will succeed well in a warm greenhouse, and it highly merits a place in every one; it does well with us so far, and appears to bloom freely when a dwarf plant.

### 2. PETASOSTYLIS NIGRESCENS.—(Black-flowered.)

It was first discovered by Schiede at Papantla, in Mexico. Mr. Skinner, since then, found it in Guatemala. It appears to be a biennial plant, growing and blooming very freely in the greenhouse. It produces an upright stem, scarcely branched for half a-yard high, which terminate in a large, much branched panicle, two to three feet high. The graceful, dark, drooping flowers give a very interesting appearance, and continue for several months. The blossoms on the plant our drawing was taken from, it appears, were not grown to so perfect a state, although it was exhibited at the Chiswick Show; as we have seen it since with flowers upwards of double the size. It is so peculiarly interesting as to deserve a place in every greenhouse. It strikes readily from cuttings, and has produced seed, too, in this country.

## ARTICLE II.

### THE METROPOLITAN FLORAL EXHIBITIONS.

Metropolitan Floricultural Society, *September* 25.

(*Concluded from p.* 270.)

Some observations upon the Seedling Dahlias only remain to complete our account of this exhibition.

The prizes awarded to seedlings at this meeting is, generally speaking, regarded as a tolerable guide to the purchaser; but it is to be considered that even there a difficulty is sometimes likely to arise in finding proper judges, because most of the best growers are themselves exhibitors of seedlings, and consequently precluded from acting,—who, on looking at a flower, duly bear in mind and consider all it ought to be. A kind new in colour, of remarkable shades, or brilliant lacing, is almost sure to confine the judgment of many. It is true, novelty in colour is entitled to some preference, and as all the points of perfection cannot be attained at once, it may be allowed to rank with better-shaped flowers until another, of the same colour, having an improved shape, is obtained to displace it. At the present day, in stands placed for competition, such flowers as Grand Tournament (Union), Princess Royal (Hudson), or Cleopatra (Attwell), claim to be placed side by side with Beeswing (Drummond), Nonpareil (Proctor), or Standard of Perfection (Keynes), because they are of general good form, and there not being others of the same colour to beat them; yet had these very flowers been of a different colour, a crimson or red for instance, they would certainly be considered coarse and bad. A really good seedling, therefore, if not new in colour, ought to be a manifest improvement upon all others of the same class already out.

Size, again, is to some persons an equivalent for other defects, and consequently regularity of outline or perfection of the centre is too often sacrificed thereto. Compactness of form is the most necessary quality to all flowers, consequently unless the size be exceedingly small, it is entirely of a secondary character, and this should never be forgotten.

Compactness in form must not, however, be confounded with extreme doubleness, which is a fault in some of the new sorts; for in a flower that is too full the petals are prevented developing themselves properly, and it is, therefore, very defective. Another and more extended fault in Dahlias is, that the centre is not sufficiently high to be even with the surrounding surface; this is a peculiar blemish, arising from insufficiency in number in the unbloomed petals, and by their inclining too much inwards, so that, when the exterior ones rise and open, the inner remain sunk down. The centre, consequently, to be well up, must be composed of a sufficiency of short and stiff petals, and each regularly disposed.

The following notes were made from a very careful inspection, and their accuracy may be depended upon. As observed in our last, a considerable number of seedlings were produced, particularly of the "proved" ones, as they are generally called, or those which first bloomed in 1844. By a rule of the Society, six blooms of each of these are required to be placed, and of this year's seedlings one only of each.

### CLASS VIII.

### *Seedlings of* 1844: *open to all.*

*Certificate of Merit.*—Princess Radzewell; Mr. N. Gaines, florist, Battersea. White, laced with rosy purple; in some of the flowers the colour faded to the outside. Of the average size when well grown; centre full and regular; outline very perfect. The petals are disposed in the utmost regularity, and the flower throughout is remarkably compact and fit for the choicest stand.

*Certificate of Merit.*—Sir Edmund Antrobus; Mr. J. Keynes, florist, Salisbury; noticed page 245. Exceedingly compact and symmetrical; and will be grown by most. In one or two of the flowers produced we observed a small notch or little point at the end of the petals, and the flower is somewhat too flat as compared with a perfect model.

*Certificate of Merit.*—Magician; Mr. Turner, florist, Chalvey; noticed page 246. Salmon-red, the disposition regular, but flower too thin, and consequently the outline presents angles between the petals; the flower, too, is deficient in depth. We consider it only a good second-class flower.

*Certificate of Merit.*—Burnham Champion; Mr. Bragg, florist, Slough; very much after the shape of Eclipse (Widnall), from which we should say it is a seedling, but of a deeper red colour; like that kind the flower is very double and symmetrical when perfect.

*Certificate of Merit.*—Queen of Perpetuals; Mr. Girling, nurseryman, Stowmarket; noticed page 245. Twenty-four blooms of this were exhibited, and the centre in all of them very even; some of the blooms appeared thin, but the six placed for the judges were compact enough; the size is quite of the average, it is a pretty colour, and its best blooms fit for any stand.

*Certificate of Merit.*—Mazeppa; Mr. Spary, florist, Hungerford; a beautiful clear orange colour, not above the medium size; the petals are broad and the outline is very good; the centre moderately high.

*Certificate of Merit.*—Lady Stopford; Mr. Trentfield, Lewisham; noticed page 245. Fourteen blooms of this were shown; it is a symmetrical flower and the outline is perfect; in two or three of the blooms the centre was tolerably high, but generally it appears rather too low; frequently, however, it may be found an useful show-flower.

*Certificate of Merit.*—Marchioness of Cornwallis; Mr. Whale, florist, Elcot; noticed page 246. A beautifully formed flower, though the eye is doubtful; it will be well to grow with Antagonist, as one may furnish a flower when the other fails. Both these flowers are somewhat too flat, though when perfect very excellent.

*Certificate of Merit.*—Newington Rival; Mr. Smith, Hackney; noticed page 245. A well arranged flower; rather more flat, yet partaking of the shape of Standard of Perfection, and near that colour, but certainly not so good a flower.

*Certificate of Merit.*—Prometheus; Mr. Smith; noticed page 246. This flower was shown better than when we saw it before; of the average size, and tolerably compact. Although the colour is not new, it is perhaps worth growing.

*Certificate of Merit.*—Pride of Surrey; Mr. N. Gaines; bright clear purple, of rather below the medium size; the petals well rounded and the outline very good. Like many of the cupped flowers, however, the centre is generally low.

*Certificate of Merit.*—Miss Prettyman; Mr. Turner. The colour is not favourable to this flower, though it may be sometimes very pretty; the disposition of the petals (as noticed in page 246, but where our printer very ungeniously transposed them into details), is very good, and we have no doubt it will be a desirable flower.

The following we noticed as being the best amongst the many others shown, to which no certificates were adjudicated:—

Dawn of Day (Mitchell). Only two blooms of this were shown; the colour is delicate peach and rather new; the outline is good and the centre tolerable; the size is rather deficient, but when well grown it will be a lovely flower.

Mrs. Caudle (Turner); noticed page 246. Though the disposition of the petals in this flower is very regular, the eye good, and the colour distinct, still it will never be a great favourite, because the petals fold over too much and sully the face of the flower with the dull colour of their backs; sometimes, however, flowers of this character produce blooms in the finest order, and we expect to see Mrs. Caudle now and then associated with the first quality.

Countess of Bandon (Sparry). A sort of nankeen orange tipped with a small point of yellow; shown very thin and is also deficient in depth.

Beauty of Hants (Oakley). Creamy-white, with a faint lace or tinge of pink; rather above the average size; the outline good, but the flowers are generally thin and flat.

Midland Beauty (Burbury). Rosy-peach, rather lighter to the centre of the flower; some of the blooms were thin and the petals irregularly disposed; still it will prove an useful kind.

Captain Warner (Girling). Crimson; the character of the flower is after Beeswing, but the centre is not sufficiently elevated, and the outline appears generally imperfect.

Queen Mary (Edwards). A second-rate white, thin and deficient in the centre, but may be useful.

### CLASS IX.

### *Seedlings of* 1845: *open to all.*

*Certificate of Merit.*—Demosthenes; Mr. Maher, Anthom-hill.

*Certificate of Merit.*—Lady of the Lake; Mr. Keynes.' Milky-white, with a tinge of pink to the margin; the size is good and the character promising.

*Certificate of Merit.*—Model of Perfection; Mr. Sparry. Rich red colour, excellent petal, and appears very likely to be a real good kind, but the specimen exhibited was an over-blown one.

*Certificate of Merit.*—Miss Bevan; Mr. Bevan, Shacklewell. Blush, of good character.

*Certificate of Merit.*—Goldfinch; Mr. Wicks, Chelmsford. Deep straw-colour, mottled on the margin with light crimson, and has a novel appearance, though it will never make a good show flower.

*Certificate of Merit.*—Beauty of the Vale; Mr. Hunt. Lilac; poor, and unlikely to be seen in a show again.

*Certificate of Merit.*—Joan of Arc; Mr. Oakley. White, with small pencils of pink down each petal; the centre well up, and one of the most promising flowers.

*Certificate of Merit.*—Beauty of Alresford; Mr. Burgess.

A certificate was also given to Mr. Hoare for a seedling not named, and some others were shown, but not deserving particular notice.

## ARTICLE III.

## OBSERVATIONS UPON, AND CULTURE OF, FERNS.

BY CLERICUS.

For twenty years I have been most assiduously endeavouring to collect and cultivate every species and variety of Fern I could obtain, whether hardy or such as require protection in this country; and after so much practical experience with such a very interesting and elegant tribe of plants, I am induced to forward some observations thereon, in order to induce a more general cultivation of them.

I have above stated that I deem the Fern tribe of plants interesting and elegant. The tender verdure of their foliage, the disposition of their beautiful forms, and very graceful habit, also their charming figures and airy aspect, alike contribute to their specially pleasing character. They are, moreover, peculiarly admirable, on account of the manner in whch their singular inflorescence (blossom) is borne. It is generally at the under side of the leaves, either in small round patches or long streaks, and the colour usually brown. The Palypodiums are especially pretty in the distinct coloured round patches, and Adiantums, with darker irregular ones; not one of the whole tribe but in these respects are exquisitely beautiful.

The Ferns are singularly useful for flourishing in shady situations, where scarcely any other plants will thrive. For ornamenting rockwork; for covering old walls, or otherwise unsightly ones; for growing in rustic baskets, or on logs of wood, suspended in plant-houses, in which mode the under side, where what is commonly termed the flowers are disposed, is very distinctly to be seen; for growing amongst some of the kinds of orchideæ, to hide the naked stems; for decorating any kind of rustic work; for planting amongst the shrubs in a conservatory, in order to enliven the surface of the border by their exquisite evergreen, which at all times is delightful to the eye.

I find that all Ferns flourish best in shade, hence those grown in the open air should be placed so as to be shaded from the sun during the heat of the day, and better still if there be a northern aspect to a rockery, and allow them the advantage of it. In many cases the shade of a grotto, summer-house, back of a wall, rocks or large irregular roots, or canopy of trees, supply very suitable situations for growing them in. In fact, where the direct beams of the midday sun do not shine upon them, the greater portion will flourish in luxuriance, and finely exhibit their beauty. In rockeries situated in the open air, they form admirable companions to mosses, lichens, &c. They are, too, the greatest ornaments to a rockery in the stove or greenhouse. I have a plant stove which is formed so that I have a four-feet pathway up the centre, and a raised stage for plants on each side. At the upper end of the house I have a tank, which forms a half circle, and water-plants are grown in it; and it contains a variety of gold and silver fish, &c. The end wall, which forms the back of the tank, was constructed of very irregular-faced portions of old rock, which I selected, being scattered about, in an unfrequented wood. They were covered over with moss, lichen, &c. I had them so disposed in the wall as to form bold outlines, and suitable interstices to deposit soil, &c., in which to grow ferns, mosses, &c., in order to give shade to them. I had canvass at first, and then had some climbers planted, which now spread wholly over the under side of the roof. The moisture, too, arising from the water in the tank contributes very essentially to their success. I have omitted to state that the face of the rock-work is formed somewhat circular too, in order that the plants might be near enough to be inspected. I beg to assure the readers hereof that this rockery is one of the most interesting objects I ever saw in a plant-house. I have, within the last four years, planted a number of suitable orchideæ amongst the Ferns, &c., and they do admirably so placed. I have my plant-house heated by hot-water pipes, and a pipe is carried through the tank, and the water is of a gentle tepid warmth, and gives a moist vapour to the rock plants. I am careful to have the entire rockery watered, and in all respects attended to as my pot plants are, and they very amply repay for the attention. The soil I find all Ferns to thrive luxuriantly in is rotten vegetable mould and sandy peat. I have the former collected in the woods, under oak trees; in such compost I grow them, whether in-doors or out in the open air.

I have had a number of wire, wicker, and other rustic baskets formed, in which I planted Ferns, and suspended them in sundry places in my plant-house, and disposing them tastefully; they not only do well, but appear neat and interesting. A few of the small and neat Ferns planted at the sides of an orchidæa basket, so suspended, is very pretty. I have had several rustic portions of old decayed trees, stumps, &c., placed in suitable situations in my pleasure-ground under shade, and near to a walk, and in the hollows have planted Ferns with great effect; the shade, I find, always gives the fine lively green hue, which is not to be attained in bright sunshine. A moderate moist atmosphere is very beneficial to Ferns, and especially so when grown in plant-houses.

The wild specimens which are seen growing on the bank of a shady ditch or brook always flourish best; they there have the four essentials—a moist, cool, and shady situation, and a vegetable soil. Of course the coolness only applies to growing in the open air; exotic ones require a suitable temperature, but not a high one even there. When Ferns are grown in pots, plenty of bits of turf, rotten wood, or something of the kind, must be liberally supplied to form drainage, and well rotted leaf mould and sandy heath soil form the compost; with these necessary requisites, and attention to situation, watering, g, or replanting, this lovely tribe may be cultivated most satismanence of temperature of the two methods, we shall find a very remarkable difference in favour of pipes heated with hot water.

"The weight of steam at the temperature of 212°, compared with the weight of water at 212°, is about as 1 to 1694; so that a pipe which is filled with water at 212° contains 1694 times as much matter as one of equal size filled with steam. If the source of heat be withdrawn from the steam pipes, the temperature will soon fall below 212°, and the steam immediately in contact with the pipes will condense; but, in condensing, the steam parts with its latent heat; and this heat, in passing from the latent to the sensible state, will again raise the temperature of the pipes. But as soon as they are a second time cooled down below 212°, a further portion of steam will condense, and a further quantity of latent heat will pass into the state of heat of temperature;* and so on until the whole quantity of latent heat has been abstracted, and the whole of the steam condensed; in which state it will possess just as much heating power as a similar bulk of water at the like temperature; that is, the same as a quantity of water occupying $\frac{1}{1694}$ part the space which the steam originally did.

"The specific heat of uncondensed steam compared with water is, for equal weights, as ·8470 to 1; but the latent heat† of steam being estimated at 1000°, we shall find the relative heat obtainable from equal weights of condensed steam and of water, reducing both from the temperature of 212° to 60°, to be as 7·425 to 1; but for equal bulks it will be as 1 to 228; that is, bulk for bulk, water will give out 228 times as much heat as steam, on reducing both from the temperature of 212° to 60°. A given bulk of steam will therefore lose as much of its heat in one minute as the same bulk of water will lose in three hours and three quarters.

"When the water and the steam are both contained in iron pipes the rate of cooling will, however, be very different from this ratio; in consequence of the much larger quantity of heat which is contained in the metal itself, than in the steam with which the pipe is filled.

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* The heat of temperature is that which is appreciable by the thermometer; and the term is used in contradistinction to latent heat, which is not capable of being measured in a direct manner by any instrument whatever.

† The results of different experiments on the subject of the latent heat of steam, although somewhat various, are yet sufficiently near for all practical purposes. Watts's experiments give 900° to 950°; Lavoisier and Laplace, 1000°; Mr. Southern, 945°; Dr. Ure, 967° to 1000°; and Count Rumford, 1000°.

"The specific heat of cast-iron being nearly the same as water, if we take two similar pipes, 4 inches diameter, and ¼ of an inch thick, one filled with water, and the other with steam, each at the temperature of 212°, the one which is filled with water will contain 4·68 times as much heat as that which is filled with steam; therefore if the steam pipe cools down to the temperature of 60° in one hour, the pipe containing water would require four hours and a half, under the same circumstances, before it reached the like temperature. But this is merely reckoning the effect of the pipe and of the fluid contained in it. In a steam apparatus this is all that is effective in giving out heat; but in a hot-water apparatus there is likewise the heat from the water contained in the boiler, and even the heat from the brick-work around the boiler; which all tends to increase the effect of the pipes, in consequence of the circulation of the water continuing long after the fire is extinguished; in fact, as long as ever the water is of a higher temperature than the surrounding air of the room. From these causes, the difference in the rate of cooling of the two kinds of apparatus will be nearly double what is here stated; so that a building warmed by hot water will maintain its temperature, after the fire is extinguished, about six or eight times as long as it would do if it were heated with steam.

"This is an important consideration wherever permanence of temperature is desirable; as, for instance, in hothouses, conservatories, and other buildings of a similar description; and even in the application of this invention to the warming of dwelling-houses, manufactories, &c., this property, which water possesses, of retaining its temperature for so long a time, and the very great amount of its specific heat, prevents the necessity for that constant attention to the fire which has always been found so serious an objection to the general use of steam apparatus.

"The velocity with which a pipe or any other vessel cools when filled with a heated fluid depends principally upon two circumstances; the quantity of fluid that it contains relatively to its surface, and the temperature of the air by which it is surrounded; or, in other words, the excess of temperature of the heated body above that of the surrounding medium. The subject of the radiation of heat, and the rate at which a heated body cools, under various circumstances, will be fully considered in another chapter. But for temperatures below the boiling point of water, and under such circumstances as we are now considering with regard to hot-water pipes, the velocity of cooling may be estimated simply in the ratio of the excess of heat which the heated body possesses above the temperature of the surrounding air. The variation in the rate of cooling, arising from a difference of the superfices to the mass, is, for bodies of all shapes, inversely, as the mass divided by the superfices. Therefore the relative ratios of cooling, for any two bodies of different shapes and temperatures, is the inverse numbers obtained by dividing the mass by the superficies, multiplied by the direct excess of heat above the surrounding air; provided the temperature of the heated bodies be below 212°. Thus, suppose the relative ratio of cooling be required for two cisterns filled with hot water, one a cube of 18 inches, at the temperature of 200°; the other a parallelopiped, 24 inches long, 15 inches wide, and 3 inches deep, at the temperature of 170°; the surrounding air in both cases being 60°. Then, as

| | Inches. | | Inches. | | |
|---|---|---|---|---|---|
| The cube contains . . . | 5832, | divided by | 1944, | the superficies | = 3·0 |
| The parallelopiped contains. | 1080 | ditto | 954 | ditto | = 1·13 |

The inverse of these numbers is, to call the cube 1·13, and the parallelopiped 3·0. Then multiply 1·13 by 140 (the direct excess of temperature of the cube), and the answer is 158·2; and multiply 3·0 by 110 (the direct excess of temperature of the parallelopiped), and the answer is 330·0. Therefore the parallelopiped will cool, in comparison with the cube, in the proportion of 330 to 158, or as 2·08 to 1; so that, if it requires two hours to cool the cube, a half, or a quarter, or any other proportional part of its excess of heat, the other vessel will lose the same proportional part of its excess of heat in one hour.

"It is evident that these different velocities of cooling are quite independent of the effect that the respective bodies will produce in warming a given space; for as the cube contains upwards of six times as much water as the other vessel, so it would warm six times as much air, if both vessels were of the same temperature. But if six of the oblong vessels were used, they would heat just the same quantity of air as the cube; but the latter would require rather more than 2½ hours to do what the oblong vessels would accomplish in one hour, supposing the temperature to be the same in both cases. In the previous example the temperatures are supposed to be different; otherwise the relative ratio of cooling of the two vessels would have been as 2½ to 1, instead of 2 to 1, as stated.

"In estimating the cooling of round pipes the relative ratio is very easily found; because the inverse number of the mass divided by the superficies is exactly equal to the inverse of the diameters. Therefore, supposing the temperature to be alike in all,

| If the diameter of the pipes be . . | 1. | 2. | 3. | 4 inches, |
|---|---|---|---|---|
| The ratio of cooling will be . . . | 4. | 2. | 1·3 | 1 |

That is, a pipe of 1 inch diameter will cool four times as fast as a pipe of 4 inches diameter; and so on with the other sizes. These ratios, multiplied by the excess of heat which the pipes possess above that of the air, will give the relative rate of cooling when their temperatures are different, supposing they are under 212° of Fahrenheit; but if the temperatures are alike in all, the simple ratios given above will show their relative rate of cooling, without multiplying by the temperatures. When the pipes are much above 212°, as, for instance, with the high pressure system of heating, the ratio of cooling must be calculated by the rules given in the IXth Chapter.

"The unequal rate of cooling of the various sizes of pipes renders it necessary to consider the purpose to which any building is to be applied that is required to b heated on this plan. If it be desired that the heat shall be retained for a great many hours after the fire is extinguished, then large pipes will be indispensable; but if the retention of heat be unimportant, then small pipes may be advantageously used. It may be taken as an invariable rule, that in no case should pipes of greater diameter than 4 inches be used, because, when they are of a larger size than this, the quantity of water they contain is so considerable, that it makes a great difference in the cost of fuel, in consequence of the increased length of time required to heat them. For hothouses, greenhouses, conservatories, and such like buildings, pipes of 4 inches diameter will generally be found the best; though, occasionally, pipes of 3 inches diameter may be used for such purposes, but never any of a smaller size. In churches, dwelling-houses, manufactories, &c., pipes of either 2 or

3 inches diameter will, perhaps, upon the whole, be found the most advantageous; for they will retain their heat sufficiently long for ordinary purposes, and their temperature can be sooner raised, and to more intensity than larger pipes; and, on this account, a less number of superficial feet will suffice to warm a given space.

In adapting the boiler to a hot-water apparatus it is not necessary, as is the case with a steam boiler, to have its capacity exactly proportional to that of the total quantity of pipe which is attached to it; on the contrary, it is sometimes desirable even to invert this order, and to attach a boiler of small capacity to pipes of large size. It is not, however, meant, in recommending a boiler of small capacity, to propose also that it should be of small superficies; for it is indispensable that it should present a large surface to the fire, because, in every case, the larger the surface on which the fire acts, the greater will be the economy in fuel, and, therefore, the greater will be the effect of the apparatus.

"The sketches of the boilers, figs. 16 to 26, are several different forms which present various extents of surface in proportion to their capacity.

"All except the first two, however, have but a small capacity, relatively to their superficies, compared with boilers which are used for steam. There is no advantage whatever gained by using a boiler which contains a large quantity of water; for, as the lower pipe brings in a fresh supply of water as rapidly as the top pipe carries the hot water off, the boiler is always kept absolutely full. The only plausible reason which can be assigned for using a boiler of large capacity is, that as the apparatus then contains more water, it will retain its heat a proportionably longer time. This, though true in fact, is not a sufficient reason for using such boilers; for the same end can be accomplished, either by using larger pipes, or by having a tank connected with the apparatus which can be so contrived, by being enclosed in brick or wood, or some other non-conductor, as to give off very little of its heat by radiation, and yet to be a reservoir of heat for the pipes after the fire has been extinguished. If this tank communicates with the rest of the apparatus by a stop-cock, the pipes can be made to produce their maximum effect in a much shorter time than if this additional quantity of water had been contained in the boiler, and a more economical and efficient apparatus will be obtained. The circulation will likewise be more rapid from a boiler which contains but a small quantity of water, because the fire will have greater effect upon it, and will render the water which is contained in it relatively lighter than that which is in the descending pipe."

## ARTICLE V.

### ON THE CULTURE OF THE ANEMONE,

BY A LADY FLORIST.

Observing in the July Number of the Cabinet the descriptive selected list of the finest Anemonies, and being an ardent admirer of that very handsome tribe of flowers, I forward for insertion in the September Number the particulars of a most successful mode which I have adopted for the last three seasons.

Having fixed on the place for the bed, dig out the soil to the depth of sixteen inches, and then place a layer of five or six inches of well-rotted cow dung, and on this a surface layer of light rich, mellow loam, quite free from manure, raised to two inches above the level of the surrounding surface; this should be done about the latter end of September. Plant the roots from the beginning to the middle of October; by this means they will be found to blow stronger, and the roots when taken up will be found of a larger size than if planted in November. When the bed is levelled, draw lines across about five inches apart, in which the roots are placed with the crowns upwards, which is easily discerned by a close examination, laying a little river sand under and upon each root; then cover them as near two inches as possible with pure mellow loam. Nothing more need be done to them till they appear above ground, except the winter be very severe, which, if that is the case, the roots will require a little protection. Lay a mat over the bed in very severe frost, and regularly take it off for about four hours at the middle of each day; but when the frost is not very severe place no mat over them, which, if kept on when not much occasion for it, rather injures than benefits them. When the leaves are above ground, choose a dry day to press the soil close to the plants, as the leaves generally remove the soil in coming up, which is very injurious to the roots if exposed. In dry weather they require watering. Give them a good soaking with liquid manure; for it is wrong to wait till the leaves begin to flag for want of water, because leaves from a tuberous root show a vigour which does not entirely arise from the state of the soil, therefore the soil should be examined and treated accordingly. As the flowers expand, they must be shaded both from sun and rain. Shade them with a covering raised two feet from the ground, so that air can pass freely underneath, to prevent the stems being weakened, and unable to support the weight of the flowers. After the bloom is over, watering is no longer necessary, but the bed should be shaded in the middle of hot days, and from wet, or the tubers will be kept in a state of excitement, and be thereby materially weakened and injured. By these means the foliage will soon begin to change its colour, and become brown and dry, which will point out the time to take up the roots, which should be done a month after the bloom is over. In clearing away the fibres and soil that adheres to them, handle the roots very gently as they are exceedingly brittle. The pieces that happen to break off do not throw away, for in a few years they will become fine blooming roots. Finally, clean the tubers and put in a drawer, which place in an airy part of a room secure from frost, where they remain till the planting season. If any of the roots are large divide them, taking care to have two or three eyes to each piece; such usually blow the first year. In selecting roots for a flower-bed, choose such as are fresh and plump, of a medium size, for large overgrown roots are hollow, and decayed in the centre; these take care to avoid, as they never bloom strong, the flowers being very small. If the flower was originally very full and double, with age it loses that property; the petals become small, irregular, and diminish in number, and finally, the sort perishes.

# PART II.

## LIST OF NEW AND RARE PLANTS.

**Azalea Ludovicia.** Garden Hybrid. (Bot. Reg.) The Hon. and Rev. William Herbert raised this very pretty variety from seed which had been obtained from Rhododendron ponticum, impregnated with the pollen of Azalea pontica. The flowers are numerously produced in fine heads. Each blossom has a short tube, and the expanded division of the flower is nearly two inches across, pale yellow, handsomely tinged with rose, and the upper segment having several distinct darker spots. The specific name Ludovicia was so given by Mr. Herbert, in compliment to his eldest daughter Louisa.

**Cattleya granulosa, var. Russeliana. The Duke of Bedford's Rough-lipped.** (Bot. Reg. 59.) Orchideæ. Gynandria Monandria. It is a variety of the Guatemala C. granulosa, imported into this country by Mr. Skinner to the collection of the Duke of Bedford. Sepals and petals green, spotted with red. Labellum, towards the origin, is yellow, with red spots, and the broad termination white. Each blossom is about five inches across.

**Dendrobium Kingianum. Captain King's.** (Bot. Reg.) Orchideæ. Gynandria Monandria. Received by Messrs. Loddiges in a collection of New Holland plants. The flowers are produced in an erect spike. Each flower is about one inch across, beautiful pink, spotted with crimson.

**Genista (Teline) Spachiana. Mr. Spach's Genista.** (Bot. Mag. 4195.) Leguminosæ. Diadelphia Decandria. This pretty flowering plant is a native of the Canary Islands, found on the north-west mountains of Teneriffe. It is a shrubby plant, which will probably prove hardy in the warmer parts of this country. The flowers are produced profusely, in pendant terminal heads, of a bright yellow colour; it well deserves cultivation, being very showy.

**Hebecladus biflorus. Twin-flowered.** (Bot. Mag. 4192.) Solaneæ. Pentandria Monogynia. This most beautiful flowering plant is a native of the Peruvian mountains. Messrs. Veitch's, of Exeter, have lately received it. It is stated to be a greenhouse shrub, blooming very freely. The flowers are drooping; much like some of the drooping flowered Corræas. Each blossom is about one inch long; tube, purple, with green segments.

**Ixora odorata. Fragrant.** (Bot. Mag. 4191.) Rubiaceæ Tetrandia. Monogynia. (Synonym Ixora Brunonis.) It is a native of Madagascar, and is in the collection of Messrs. Lucombe, Pince, and Co., of Exeter. It was exhibited at the London Floral Shows during the present year, and much admired. The leaves of this noble and highly fragrant shrub, Sir William Hooker observes, vie in size, and almost in firmness of texture, with those of the Indian Rubber-tree. The flowers are produced in large spreading panicles, each panicle being a foot or more in diameter; the branches being of a deep red purple colour. Each blossom is about five inches long; the tube, red below, white above, and the floral buds white, tipped with bright rose. The spreading segments of the flower, at first white, change to a rich buff as they become old. The plant exhibited at Chiswick Show by Messrs. Lucombe, Pince, and Co., was about a yard high. It deserves a place in every hothouse.

**Jacaranda tomentosa. Tomentose.** (Pax. Mag. Bot.) Bignoniaceæ. Didynamia Angiospermia. (Synonym Bignonia Mauritiensis.) It is a native of South America, and grows to a moderate sized tree. It can be cultivated in this country, so as to bloom in the stove or warm greenhouse, in a dwarf state; a plant about two to three feet high. It has bloomed very freely in a dwarf state at the nursery of Messrs. Knight and Perry, of Chelsea, near London. The flowers are tubular; each about the size of a common foxglove, of a pretty rosy-lilac colour; they are produced in small lateral panicles of two or three in each; and, as there are very many of such lateral ones, they unitedly form a fine headed, spike-like, panicle. It well merits a place in every situation it can be successfully grown in. The plant may be purchased at a very reasonable price.

**Lycaste Fulvescens. Tawny flowered.** (Bot. Mag. 4193.) Orchideæ. Gynandria Monandria. Received by Rev. John Clowes, of Broughton Hall, near Manchester, from Columbia. Each of the flower-stems are from nine inches to a foot high, one flowered. The sepals and petals are of a brownish yellow, and the lip of a rich orange colour. A separate flower is about five inches across.

**Oncidium incurvum. Curve petalled.** (Bot. Reg. 64.) Orchideæ. Gynandria Monandria. This very beautiful and rare species was first observed in bloom in this country in the collection of George Barker, Esq., of Birmingham. The flowers are produced in a long, erect, and even branched panicle. Sepals of orange at its origin. It is a very pretty and highly interesting species, meriting a place in every collection.

**Potentilla bicolor.** Two coloured. (Bot. Reg. 62.) Roseaceæ. Icosandria Polygynia. An herbaceous plant from Nepal. The flowers are of a clear yellow, over which is a net-work of rosy red. Each blossom is an inch across. It is in the garden of the London Horticultural Society.

**Scævola attenuata.** Attenuated-leaved. (Bot. Mag. 4196.) Goodenovieæ. Pentandria Monogynia. From the Swan River Colony. It is a very pretty flowering greenhouse shrub, blooming very freely through the summer season. The plant grows about two feet high, producing numerous terminal and lateral spikes of flowers, which are of a bright blue, tinged with purple. Each blossom is about an inch across, having much the resemblance of a cineraria flower having one-third cut out; and, as the flowers face sideways, it is the upper portion exhibits the deficiency. It will be a very suitable plant for grouping in the flower-garden. The foliage being narrow, and the flowers profuse.

**Smeathmannia lævigata.** Smooth stalked. (Bot. Mag. 4194.) Passifloreæ. Polyandria Pentagynia. A hothouse shrub, with glossy green foliage. It is an evergreen, with foliage somewhat like the bay-tree. The flowers are white, about the size of those of a Noblesse peach, and they are produced along the branches, in a similar manner, at the axil of each leaf. Mr. Whitfield sent the plant to the Earl of Derby.

**Statice Fortuni.** Mr. Fortune's Sea Lavender. Plumbaginæa. Pentandria Pentagynia. (Bot. Reg. 63.) Seeds of this yellow-flowered Statice were sent from China by Mr. Fortune in 1844. It has bloomed in the Horticultural Society's Garden at Chiswick, where, both in a frame and greenhouse, it bloomed beautifully from July to October. The flowers are produced in vast profusion in a branching panicle; have a pretty appearance: the calyx is flesh colour, and the petals bright yellow.

## Plants noticed in Nurseries, &c.

### *At Mr. Henderson's, Pine Apple Nursery.*

**Hindsia longiflora alba.** This very handsome flowering plant was in profuse bloom. The flowers pure white, longer than H. violacea, and in large heads; also very fragrant. It highly merits a place in every stove.

**Hoitzia coccinea.** In the greenhouse we observed several very beautiful specimens in profuse bloom. The flowers are produced in long spikes, tubular, about an inch and a half long, a very beautiful rich scarlet colour. The plant forms a compact little shrub, and is very showy. It deserves to be grown wherever practicable.

**Cestrum aurantiacum.** A very pretty greenhouse shrub, and, blooming at this late season of the year, gives more interest to it. The flowers are tubulous, of a rich orange colour.

**Justicia.** A new species, with rich yellow flowers.

**Melastoma Niveniana.** A stove plant; the flowers are white, about an inch in diameter.

**Eranthemum strictum.** A stove plant, blooming profusely; a fine summer, autumn, and winter plant. The flowers are produced in spikes; each blossom in form and size like a Phlox, and a pretty bright blue colour. It will flourish, too, in a warm greenhouse, and deserves to be grown wherever it can be.

**Lisianthus longiflorus.** The flowers are long, drooping, and a pretty yellow colour.

**Rhodostemma Gardenioidea.** The flowers are pure white, tube formed, much like the common white jasmine. They are produced in fine corymbous heads, and the blossoms stand erect at the centre; it is a very neat flowering plant, well deserving a place in the greenhouse.

**JUSTICIA.** (New species.) The heads of flowers are something in the way of J. speciosa, but larger and broader, and of a rich purple. It blooms very freely.

**TRACHELIUM LINEARIS.** The heads of flowers are in fine corymbs, pure white. It is a shrubby greenhouse plant, very pretty.

**COMBRETUM SPLENDENS ALBA.** Like the original splendens this is a fine climbing plant, and its beautiful white flowers produce a very pretty effect. It deserves a place in every stove. The blossoms are very fragrant.

**RUELLIA MACULATA.** The leaves are a dark green, with beautiful silver patches. If it had not a flower, it is well worth having in every collection for its beautiful foliage.

**THE NEAPOLITAN TREE VIOLET.** The plant grows to about a foot high, forming a pretty head, and blooming profusely. The blossoms are quite double, blue, and highly fragrant.

**STEPHANOTUS FLORIBUNDUS.** This fine climber, with its beauteous waxy white flowers, can be made to have a second crop of bloom, by pruning in the shoots when the spring and early summer flowers fade. Thus treated, a fine autumn bloom succeeds. The same kind of attention with **CLERODENDRON SPLENDENS** is equally successful.

**STACHYTARPHETA.** New species. This very pretty flowering species we saw in the stove at the Royal Gardens at Kew. The flowers are produced in fine pyramidal heads, of a rich velvet-blue. Its fine tubular blossoms in such heads are very beautiful.

**LEIANTHUS LONGIFOLIUS.** The foliage is very like a common jasmine, but a rich shining green. The flowers are tubulous, about two inches long, of a pretty yellow colour, and produced freely. It is a pretty plant for the greenhouse at this season of the year. We saw it at Kew.

**RUELLIA MACROPHYLLA.** The foliage is large and handsome; the flowers are of a bright scarlet, each near three inches long, and produced freely, renders it a fine plant, well deserving to be in every stove or warm greenhouse. We saw it at Kew.

# PART III.

# MISCELLANEOUS INTELLIGENCE.

## QUERY.

**ON CHRYSANTHEMUMS DECAYING BEFORE EXPANDING.** I procured some healthy plants of Chrysanthemums when the flower buds were nearly bursting. I placed them in a pot-frame I have, not heated. I supplied them with a due quantity of water, but now when opening the petals rot before expanding. I have no house to put them in, where heat can be applied. What course should I adopt? A. B.

[If the pit is kept much closed, the air will be too damp for the flowers; they being of so fleshy a substance, soon become mouldy and die away. Give all possible air when not frosty; that is essential in order to succeed. If the lights can be raised back and front, so as to have a current through, during the warmer part of the day, it will tend to dry the place. Light and air must be afforded.]

## REMARKS.

**BALSAM SEEDS.**—It is not generally known that the case in which the seed of the balsam is enclosed, yields an orange dye of a beautiful colour. As the balsam seeds freely, this could be produced extensively at a cheap rate, so as to become an object of commerce.

**Tagetes Tenuifolia.**—This is one of the best orange-coloured annuals for flower-beds with which I am acquainted. The plants were moved out of pots about the end of June; they were then six inches in height, and in bloom; they soon covered the ground, and have been full of bloom ever since. To its other qualifications, this plant possesses the good property of not looking littery, for as soon as the flowers begin to fade, the shoots branch out again with a new crop of flower, and hide the decaying blooms. It is now a dense mass, about a foot in height, and though the majority of other flowers are fading from the effects of cold, this continues as fresh and blooming as ever. The leaves have a very agreeable balsamic scent.

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**On Japan and other Lilies.**—November or early in December is the latest to pot off the beautiful Japan lilies, and no greenhouse ought to be without them in summer. Such as L. cancifolium album, punctatum, speciosum rubrum, and cruentum variety. Also L. japonicum concolor, longiflorum, eximium, testaceum, and Thunbergianum. A rough, but good, sandy, fibrous heath soil, is the best to grow them in. When potted, place them in a cool pit, frame, or the cool part of a greenhouse, so that they are kept from frost.

A London Practitioner.

**Fumigating Houses, Frames, &c.**—Most gardeners know by experience what it is to suffer from the effects of flower-pot and bellows fumigation. I think I have now fully remedied the evil. I dissolve a quantity (say 1½ oz. to a large house) of saltpetre in water, and soak brown paper in it, (old linen answers too.) after drying it in the sun, I spread tobacco thinly over as many sheets of the prepared paper as I want for present use, and roll them up like a cigar very tightly. In using them, I invert a number of flower-pots, on which I place the rolls of tobacco, and light them at both ends, and then walk out, leaving them to do the rest, which they do effectually. A little practice will dictate the quantity to be used.

F. L., *United Gardeners' Journal.*

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**Regent's Park Gardeners' Society,** *October* 30, 1845.—A paper was read, which had been forwarded by Mr. Davis, of Cambridge, on forcing flowers in the winter months. He advised, that in July and August selections of Pelargoniums, &c., should be made, taking away all bloom-buds, to be re-potted, and the plants be placed in a coal frame or pit, so as to have plenty of air. By this early preparation the plants will have laid up a store of nourishment necessary in order to insure the desired success when forced. The following plants were available for the purpose:—Pelargoniums, scarlet and other kinds; Heliotropes, Aloysia citridora, Aloasoa grandiflora, Camellias, Coronillas, Salvias, Cinerarias, Persian Lilacs, Azaleas, Rhodora Canallense, Rhododendrons, Kalmias, Sweet Briar, Lily of the Valley, Pinks, Roses, Violets, &c. The bulbs of Hyacinths, Tulips, Iris, Narcissus, Crocus, &c., should be potted early in autumn, be placed in a dark place, or be covered with tan. The seeds of Primula sinensis (the Chinese Primrose), and Lobelia gracilis (the little trailing blue and white species), if sown in March and April, and be kept growing in a cool situation, bloom very usefully during winter, and Mignonette sown in August the same. Mr. Jones thought, if Geraniums, &c., were cut down in summer, they could be grown to come in well in winter; he had found the Tom Thumb to be one of the best varieties for forcing, from its retaining its short jointed and shrubby habit. Siphocampylus was good; and Hydrangeas, struck early in spring, and kept in cool pits during summer, will be found useful. Mr. Cumming stated that Myosotis palustris (Forget-me-not) succeeded well, and should be flowered in winter.—*Gardeners' Journal.*

**Trip to Paris in Search of Autumnal Roses.**—Of the various floral improvements of modern times, nothing has probably produced such a beautiful change in the appearance of our gardens in autumn, or has been introduced with more striking effects than the perpetual-flowering Roses. What can be more cheering at this season of the year than to behold the vivid colours of many of the Bourbon and Hybrid Perpetual Roses, contrasted with the more delicate tints of Tea-scented, set off by their dark green foliage, now that autumn has set its seal on many of nature's earlier productions? I am an ardent admirer of the Rose, and my enthusiasm has, ere now, carried me to the Continent in the sultry month of June, in search of new varieties. Having this year caught the autumnal mania, I resolved to delay my visit till September, in expectation of finding the perpetual-flowering Roses blooming in greater perfection. In this I was not disappointed, and would here advise connoisseurs of Roses, who are accustomed to visit the grounds of the large growers in England, to do so twice in the year—in June for summer varieties, and in September for the autumnal sorts. I feel assured they would be well recompensed by, and highly delighted with, a September visit. The Rose gardens then assume altogether a new feature; the summer Roses are gone, and the autumnal kinds appear in all their richness and beauty. True, the autumnal Roses bloom in June, but they seem to require the long dewy nights to bring out their flowers in trueness of character, and the difference is oftentimes so great that the well-known Rose of June would be scarcely recognized when blooming in September. Thinking, however, that many lovers of Roses might not have leisure or inclination to travel so far in search of one object, which, among a multiplicity of affairs, becomes of small importance, I will endeavour to give an account of what struck me as most remarkable during my late trip. After having visited the grounds of the Hertfordshire growers, and collected the choicest of Rosa's train there, I departed well pleased with what I had seen, and resolving to make further additions from foreign cultivators. Having reached the French capital, the first cultivator to whom I paid a visit was M. Laffay, the raiser of Madame Laffay, William Jesse, La Reine, and many other of our most beautiful Roses. I there saw Hybrid Perpetual La Reine in great beauty, and should pronounce it one of the gems of the season; the colour is pink, with a lilac hue, very glossy; the flowers are globular in shape, large, and very sweet. Another of his seedlings, Comtesse Duchâtel, is a Hybrid Perpetual of a superior kind. The flowers are of a rose-colour, with thick petals, closely set; Perpétuelle Indigo is a distinct variety, of a peculiar colour, to which its name relates; Hybrid Perpetual, Mrs. Cripps, a pale Rose, appears likely to become a profuse autumnal bloomer; Perpétuelle ponctuee, a bright Rose with white spots, is a very pretty variety. Of the four last mentioned, M. Laffay has, I believe, the entire stock at present, but intends selling plants of them this autumn. He has also a Moss Rose, Princesse Adelaide, of a pale rose-colour, blooming in corymbs, and said to be very handsome. The habits of the plants were certainly remarkable, having a degree of vigour quite foreign to the Moss tribe. Their season of flowering was past, but he said that the flowers were like those of Ornament de Parade, a well known Gallica Rose; and other growers spoke well of it. Among others noticed here were Lady Alice Peel, Duchess of Sutherland, De Marx, Coquette de Bellevue, and Coquette de Montmorency—all Hybrid Perpetuals of recent introduction; the last-mentioned is in every respect a beautiful flower. M. Laffay is an enthusiastic cultivator of Roses, but a lover of fruits also.

To enumerate the various grounds visited would, I find, become tedious, and occupy too much space, having often looked through several in the course of a day. I must therefore arrange the varieties noted down as most remarkable in their respective families.

Among the Perpetuals and Hybrid Perpetuals were—Laurence de Montmorency, a free-flowering variety of a purplish-rose colour; Lady Elphinstone rosy-crimson, also a good autumn bloomer; Baronne Prevost, pale rose, sweet sweet, and of an immense size; Comte d'Eu, a most beautiful carmine, but scarcely double enough, though apparently superior to Gloire de Rosamenes; La Bedoyere, a variety of the character of Comte d'Eu, more double, and quite equal in colour; Marquisa Boccella, delicate flesh, a decided acquisition among a class of Roses, the prevailing colours of which are purple and crimson; Prince de Galles, purplish-crimson, a free grower, and seemingly well adapted for a pillar Rose.

Among the Bourbons were—Charles Suchet, purplish-crimson, of a very pretty shape; Comte de Rambuteau, of the same cast; Delisle, a dark Rose, finely cupped; Duc de Chartres, pale red, and a most superb Rose; Dumont du Courset, bright carmine, sometimes curiously marbled; Edward Defosse, a bright pink, shaped like Madame Nerard, first-rate; George Buvier, pale rose; Glory of Paris, another crimson variety, marbled with violet, and a fine rose; Imperatrice Josephine, pale pink, of a very elegant shape, blooming in corymbs; La Gracieuse, reddish crimson, a seedling from Emile Courtier, and an estimable variety; Le Grenadier, vivid crimson, frequently tinged with violet; Madame Suchet, rose and blush marbled, a delicate and beautiful variety; Princesse Clementine, violet-crimson, good; Princesse de Modena, flesh; Suchet, bright purplish-crimson, very fine; Souvenir d'Anselume, a lively cherry colour; Souvenir de Dumont d'Urville, crimson, changing to violet after expanding, and Souvenir de la Malmaison, a magnificent flesh-coloured Rose.

Among the Noisettes were—Mrs. Siddons, in the way of Le Pactole, but in its then state not superior; Similar, a yellowish buff, but in appearance a weak grower; and Chromatella, or Cloth of Gold, a Rose of yellow Noisette cast, of a paler yellow than I expected, and which does not appear to open too freely. It has, however, been an unfavourable season there for its flowering, and not being very plentiful, it may yet prove better than is anticipated.

Among the tea-scented I noticed Adam Rose, the flowers were bold and large, but not very abundantly produced; Barbot, yellow, tinted with rose, a very pleasing kind; Boutrand, rose; Comte de Paris, flesh, one of the finest tea-scented Roses; Delices de Plantier, copperas-rose, very rich looking; Josephine Malton, buffish yellow, of a beautiful form; Julie Mansais, sulphur white, the buds large and handsome; La Renommee, a whitish-yellow, not new but apparently little known; Madame Roussel, white; Marie de Medicis, rose, with fawn centre, good and distinct; Moire, large full pale yellow, a superb Rose; and Safranot, a distinct and striking variety, of a beautiful saffron colour when first expanding, gradually melting off into buff. Some of these varieties I had previously seen in England, and in equal beauty of bloom; but others I there claimed acquaintanceship with for the first time.

Roses in pots were numerous, but there were none remarkable as specimens of superior cultivation; certainly none that I saw were equal to those exhibited at the Horticultural Exhibitions about London by Messrs. Beck, Lane, Paul, and others; nor is it, perhaps, right to judge them by such a standard, as they were not grown to show what could be done with Roses in pots under good management, but merely as market plants. As such, the only objection to them by Englishmen would be the tall stems on which they were worked, and the little attention paid to their beauty. The head of the plant seemed to be considered the only part worthy of notice.

Cheshunt. W. PAUL.

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ON COTONEASTER MICROPHYLLA, TRAINED AS AN EDGING TO A FLOWER BED.—We recently saw a bed of hardy heaths surrounded with an edging, about nine inches high, formed of the Cotoneaster microphylla. It had been neatly framed, so as to form a compact edging, and when in bloom, no doubt would produce a pretty effect; but now being loaded with its beautiful red berries, produced a very pleasing contrast to the heaths then in bloom. CONDUCTOR.

## ANSWER.

ON CULTURE OF CALCEOLARIAS.—A correspondent recently soliciting some directions about growing the Calceolarias, and as I grow plants, which I exhibit at the London shows every year, from two feet to three feet in diameter, in profuse bloom, I give him the plan I pursue in as concise a way as I can. As early in autumn as I find shoots pushing rootlets, I take them off, put in loam, peat, and vegetable mould, in small pots, and put them in a slight hot-bed frame; when well rooted I place them near to the glass in a plant-house; having a double-roofed one, I have a broad shelf over the centre walk, suspended about two feet from the glass, and I place them upon it, there they get light and air, and are protected from the frost. As the plants fill the pots with roots, I have them re-potted, so as to keep them increasing in growth, for if allowed to be stinted they push weakly lateral shoots, which would bloom inferior. About the first week in March I give them a final potting, the pots being from ten to twelve inches in diameter, I then put them in a frame, give plenty of air front and back, and keep them from hot sun, shading from nine in the morning to five in the afternoon. Early in April flower-stems begin to push, I take such plants into the greenhouse, give them air and light, and a good supply of water, overhead as well as roots, shading them overhead too, and securing the shoots as they push, so as to retain only a proper proportion for blowing. The sprinkling overhead with soft water is a very essential attention when the plants are in a growing state; of course not over the blossom when they are in bloom. When the blooming season is over I cut off decayed flower stems, and have the plants placed in a sheltered situation, but a sunshine is very injurious to the Calceolaria, I have them in the shade, but where a due degree of air is afforded. I occasionally gave manure water to the roots, which is very beneficial, but never put manure in the compost. The soil I grow them in is equal portions of good turfy loam and very sandy peat, using them in a chopped and broken condition, never sifted. A very free drainage is essential.

A PRACTICAL MAN.

## FLORICULTURAL CALENDAR FOR DECEMBER.

PLANT STOVE.—Roses, Honeysuckles, Jasmines, Persian Lilacs, Azaleas, Rhododendrons, Carnations, Pinks, Primroses, Mignonette, Stocks, Aconites, Persian Irises, Crocuses, Cyclamens, Rhodoras, Cinerarias, Hyacinths, Ribeses, Sweet Violets, Lily of the Valley, Correas, Deutzias, Mezereums, Hepaticas, Gardenias, &c., required to bloom from January, should be brought in early in the present month. The plants should be placed at first in the coolest part of the house; never allow them to want water. Pots or boxes containing bulbous-rooted flowering plants, as Hyacinths, Narcissus, Persian Irises, Crocuses, &c., should occasionally be introduced, so as to have a succession of bloom. Many persons who take a delight in growing some showy Hyacinths or other bulbous plants for adorning a room or window, &c., in winter or early in spring, have been frequently disappointed by the abortiveness of some and weakness of others. This principally arises from the inability of the plant to develop itself with a rapidity equal to the quantity of moisture it imbibes on account of its upper surface being acted upon too immediately by the atmosphere, &c.; hence arises the necessity of covering the bulb. That such is a fact is evidenced by the admirable and certain success of nearly every bulb, especially Hyacinths, that is covered with about six inches of old spent bark. This or some similar light material should always be used. Even bulbs intended to bloom in glasses we prefer starting in the old bark, and then transferring them to the glasses when the shoots are about two inches long. Where such covering is not adopted, it is of advantage to have the pots or glasses kept in a dark place till the shoots are two or three inches long. Cactus plants that have been kept out of doors, or in the greenhouse, should occasionally be brought into the stove for flowering, which gives a succession. If any of the forced plants be attacked with the green fly, a syringe with diluted tobacco-water will destroy them. If the leaves appear bit, and turn brown (the effect of damage by red spider), a syringe of soap-suds at the under side of the leaves is effectual to destroy them. The glutinous substance remaining not only kills those it is applied to, but prevents others returning there. The old Eranthemum pulchellum with its fine blue flowers, Justicia speciosa, Gesneriæ Zebrina, Justicia pulcherrima, and Appellandria cristata, are fine winter ornamental blooming plants.

GREENHOUSE.—As much fire as will barely keep out frost will be necessary, and for the purpose of drying up damp arising from foggy nights, or from watering. All possible air should be admitted in the day-time, but mind to keep the plants from damage of frost. Plants of some of the Chrysanthemums that are grown in pots and taken into the greenhouse will be found to have pushed a number of suckers. If the offset are wanted for the increase of the kind, it is advisable to pinch off the tops, so as to prevent their exhausting the plant to the weakening of the flower. If the flower-buds are thinned out freely it conduces to the increased size of those left. If the offsets are not wanted, it is best to pull up the suckers entire. Attention will be required to watering, as the roots absorb much if given: give manure water occasionally. If the plant is allowed to wither, it checks the flowers, whether in bud or expanded. So much do we admire this handsome genus of flowers, that we are fully persuaded their beautiful blossoms, exhibited in form and colour, will most amply repay for any labour that may be bestowed on the plants. If seed be desired, retain the blooming stems on the plants, and keep them for some time in an airy warm situation to perfect.

Dahlia seed is best retained in the heads as grown, spread singly where they will not be liable to mould, and kept in a dry but not too hot a situation; being thus kept in the chaff, the small seeds will not shrivel, but be kept plump. The roots must be dried well before being put away, or will be liable to rot.

Fuchsias and greenhouse plants, intended to be inured to the open air, will require to have protection at the roots, and probably, for the first winter, over the tops too, by furze branches, canvass, wicker-baskets, &c.

If greenhouse plants require watering or syringing over the tops, let it be done on the morning of a clear day, when air can be admitted; and towards evening a gentle fire-heat should be given.

FLOWER-GARDEN.—Be careful to protect beds of what are technically called "Florists' flowers," should severe weather occur. Calceolarias that were cut down and repotted last month will require attention. Not to water too much, or they will damp off. Keep them in a cool and airy part of the greenhouse or pit. Whilst in a cool and moist atmosphere, the shoots will often push at the underside numerous rootlets. Where such are produced, the roots should be taken off and potted; they make fine plants for next season, and are easier propagated now than at any other season. Protect the stems of tender climbing Roses, and other kinds, by tying a covering of furze over them. that whilst it fully protects admits sufficiency of air for the well being of the plant.

Auriculus and Polyanthuses will require plenty of air in fine weather, and but little water. The like attention will be required to Carnations, Pinks, &c., kept in pots. Dahlia roots should be looked over, to see if any are moulding or likely to damage. Let the roots be dry before they are laid in heaps. Newly planted shrubs should be secured, so that they are not loosened by the wind. The pots of Carnations and Picotees should be placed in a situation where they may have a free air, and be raised above the ground. If they are under a glass-case, it will be much better than when exposed to the wet and severity of the winter, or many will in all probability be destroyed. Where it is desirable to leave patches of border-flowers undistributed, reduce them to a suitable size by cutting them round with a sharp spade. When it is wished to have a vigorous specimen, it is requisite to leave a portion thus undisturbed. Ten week Stocks and Mignonette, in pots for blooming early next spring, to adorn a room or greenhouse, must not be over watered, and be kept free from frost. A cool frame, well secured by soil or ashes at the sides, and plenty of mats or reeds to cover at night, will answer well. Tender evergreens, newly planted, would be benefited by a little mulch of any kind being laid over the roots. During hard frosts, if additional soil be required for flower-beds upon grass lawns, advantage should be taken to have it conveyed at that time, so that the turf be not injured by wheeling. Pits or beds for forcing Roses, &c., should be prepared early in the month. Tan or leaves are most suitable, unless there be the advantage of hot water or steam. New planted shrubs of the tender kinds should have their roots protected by laying some mulch, &c. Suckers of Roses, &c., should now be taken off, and replanted for making bushes, or put in nursery rows; soils for compost should now be obtained. Beds of Hyacinths, Tulips, &c., should have occasional protection. Any roots not planted may successfully be done in dry mild weather till February.

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